1-1-1978

Design, implementation, and evaluation of an inservice teacher training model for health education in an urban elementary school setting.

Carole Anne Anderson
University of Massachusetts Amherst

DESIGN, IMPLEMENTATION, AND EVALUATION OF AN INSERVICE TEACHER TRAINING MODEL FOR HEALTH EDUCATION IN AN URBAN ELEMENTARY SCHOOL SETTING

A Dissertation Presented

By

CAROLE ANNE ANDERSON

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

April 1978

Education

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Approved as to style and content by:

Byrd L. Jones, Chairperson

Atron A. Gentry, Member

Charles Kay Smith, Member

Mario D. Fantini, Dean
School of Education

For my brother, Tim, who gently, patiently, and persistently guided me in this direction.

For my Mother, who independently assumed her place in the world and serves as a role model for me to assume mine.

A C K N O W L E D G E M E N T S

Sincere appreciation is extended to many persons whose support and encouragement have facilitated my doctoral program.

In particular:

. . . Byrd L. Jones, Chairperson of my committee, whose vision, understandings, and acceptance of differences guided my academic growth, encouraged my thinking, and influenced by professional contributions.

. . . Atron A. Gentry, committee member, who shows me the value of a commitment to others, and who reminds me when I forget.

. . . C. Kay Smith, committee member, who encouraged me to blend what I know with what I want.

. . . Carolyn C. Peelle, my friend and advisor, whose support and good cheer made the years of graduate school a better experience.

. . . The students, teachers, and staff of Sacred Heart Elementary School whose participation in this study is greatly appreciated.

I am also deeply grateful to many persons who helped me to see those times of turmoil as unimportant, and whose warm encouragement helped me to accept the challenges of change.

Especially:

. . . Dick Turner, who I can always count on to lift my spirits and tease me into laughter.

. . . Una Wilson Anderson, whose sisterly love and quiet encouragement I could not have done without.

. . . Silvija Aprans, whose typing skills and sense of professionalism were especially helpful in the final days of these four years.

. . . Sally Coppus, whose friendship, ability to understand and accept helped to make adaptation a positive growing experience, and who enabled me to know it was just fine to be a "pump house chick" from the West.

. . . The "gleesome threesome" and "roarsome foursome" who gave each other laughter, support, love, and challenge.

. . . Susan Churchill-Nachazel, who accepted those collect phone calls before the writing of each chapter, and who argued in favor of experiencing risk.

. . . Eric and Stacey Anderson, whose track and gymnastic abilities are visible illustrations that environment is more influential than heredity.

. . . The Farren Emergency Room, where I maintained my nursing skills and continued to realize the power of education.

ABSTRACT

Design, Implementation, and Evaluation of An Inservice Teacher Training Model for Health Education in An Urban Elementary School Setting

(May 1978)

Carole Anne Anderson, R.N., Los Angeles County University of Southern California Medical Center School of Nursing, M.Ed., University of Massachusetts, Ed.D., University of Massachusetts

Directed by: Professor Byrd L. Jones

Changing ideas of health require a different teacher training program for urban elementary teachers. The goal is to design, implement, and evaluate an inservice program which presents health as a humane process rather than merely to provide information about health. Three modules include learning goals, curriculum, learning activities, an evaluation instrument, and teacher responses and results. Teachers are encouraged to consider the community setting and the people who comprise it, and to address individual and differing health needs as they develop educational goals, plan curriculum, and teach about health.

The first module, "Developing An Individual Perspective to Health," includes three areas. First, the environment or external influences must be recognized and accounted for in order to understand personal health. Secondly, adaptation is a mechanism that helps to shape individuality. Thirdly, growth and development is a process that involves a certain amount of risk-taking. Such risk-taking can be considered dangerous or rewarding but is none the less essential to an individual's health which is increasingly based on students' choices.

The second module, "A Multicultural Perspective of Health," provides an appreciation and understanding of cultural diversity. Urban schools are particularly effected by issues of race and poverty. Some health matters are hereditarily determined, and environmentally or culturally influenced. Certain health problems are related to those who are economically affluent, while other health problems are commonly found among the poor. Teachers need sensitivity to real racial and economic differences as well as basic human similarities.

"Community Interrelatedness and Health" explores classroom curricula, school health services, and the procedures and practices that contribute to a healthful school environment. This module encourages teachers to design an

overall school health program responsive to the needs of students.

Recent trends noted in the health of American peoples show that individual responsibility is key for confronting many common health problems. Individuals who are educated and informed about health possess the understandings necessary to assume responsibility for avoiding or minimizing health problems. Educational intervention may now be more timely than medical intervention.

Inservice education can offer a viable approach for presenting teachers with health concepts, methods, and materials that are both relevant and functional. In turn, teachers will be better able to prepare children to consider, individually, what health may mean and plan for future health choices and responsibilities.

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CHAPTER I

INTRODUCTION

The Study

This study consists of the design, implementation, and evaluation of an inservice teacher training program in health. Three separate inservice modules were presented, onsite, in an urban elementary school as part of the school's inservice program. Teachers, aides, and administration participated in the program.

The purposes of this study were (1) to ascertain teachers' ideas and attitudes about health, and the health needs of the children they teach; (2) to introduce the notion that health must be individually determined, based upon the differing health options and goals in the future of the child; (3) to encourage teachers to create their own materials and methods for instruction; and, finally (4) to evaluate teachers' interest and receptiveness for instructing in health. Moreover, the author sought to determine the feasibility of teacher-generated comprehensive school health curricula, given exposure to health content, methods, and materials.

The ideas for this study began to take form in the Spring of 1977 when the author was working in the school in which the study took place, presenting health lessons to a

fifth-grade class. While teaching children about health, it became apparent that both students and teachers throughout the school were interested and receptive to the content and materials being used. Teachers from other parts of the building stopped to view displays and student projects. School staff asked health-related questions because of the author's prior professional training as a Registered Nurse and current teaching activities. For example, a fourth grade teacher had expressed her personal interest in developing a health unit, but was not sure where to find curriculum resources or time within the course of the day's schedule to teach the proposed unit.

Plans for a series of Fall, 1977 inservice health workshops began to evolve in a number of meetings with the school's principal. She, too, became interested in the idea of health teaching within the school. Most willing to lend support, help to structure a suitable organizational format, and allocate inservice time, the principal, school staff, and author finalized plans for three health inservice workshops scheduled for early fall. Further, the principal affirmed the school's commitment to this study by submitting a letter of intention to the author's major advisor.

Population

Springfield, Massachusetts is a medium sized, urban setting. According to the 1975 census for Springfield, the total city's population is 168,785.[1] It is the third largest city in the Commonwealth. Springfield's population is multicultural with significant numbers of Spanish surnamed and black peoples.

Sacred Heart Elementary School was the site of the inservice program. This parochial elementary school serves 365 students in grades kindergarten through eight. Students attending Sacred Heart School represent a variety of ethnic and cultural backgrounds. Nearly one third of the student body is Spanish surnamed; another one third is black.

The school consisted of a staff of thirty. The staff included twenty-four full-time teachers, a Title I teacher, a bilingual community liaison counselor, a librarian, and the principal. Eight of the teachers had been awarded masters degrees, and another eleven were enrolled in graduate level courses. All staff were invited to participate in the health workshops.

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[1] U.S., Department of Commerce, Bureau of the Census, County and State Data Book 1975: A Statistical Abstract Supplement, Prepared by William Lerner, (Washington. D.C.: Government Printing Office, 1976), p. 702.

Sacred Heart Elementary School is highly supportive of inservice programs. Two afternoons each month are set aside for inservice presentations. Workshops are presented by professional educators and community representatives from varying academic disciplines. Health was the focus of the entire fall semester's inservice program. In addition to the author's program, the school invited the YMCA, located in close proximity to the school, to present their newly established community health program for children. The intent of that program was to encourage all children to participate in an active physical exercise plan based on individual abilities.

Design

Three two-hour modules were presented on inservice days at Sacred Heart School over a two month period. Each module represents a unique view of health. All modules were designed to present health as a humane process rather than merely to present information about health. In other words, the program did not attempt to present a "package" but rather to stimulate teachers and staff to shape school health curriculum based upon student and community needs. It was felt that the goals for such a program could best be determined by teachers, students and parents themselves. The impact of experiences in which teachers and students take responsibility in the planning process has been found

to be meaningful and important. "People do not sabotage their own projects."[2]

As the literature reports, health educators are attempting to broaden the scope of health teaching to include socially relevant matters. Each module is constructed to focus on how individuals might better attain a sense of power over their lives through an understanding of what in the environment impacts upon personal health. Each module is designed to stand alone. It is hoped that by inquiring into these selected topics with teachers and staff, when educational goals for elementary health are designed and put to practice, they will account for the community setting, the people who comprise it, and address individual and differing health needs.

The first module, "Developing an Individual Perspective to Health," was presented on October 12, 1977. This initial module was designed to provide teachers and their students with an awareness of why an individual view of health is imperative and how this view relates to a greater sense of community. Stress was placed on

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[2]Arthur Combs, et al., Helping Relationships: Basic Concepts for the Helping Professions, (Boston: Allyn and Bacon, 1971), p. 36.

understanding how teachers and children can begin to determine their health levels and assess personal health needs.

"A Multicultural Perspective of Health," the second module, was presented on October 26, 1977. This module was developed to provide teachers and students with an awareness of how cultural factors shape individual perceptions of health. Commonly held assumptions and myths about particular health habits were explored. In addition, issues and needs specific to cultural groups were discussed.

The final module, "Community Interrelatedness and Health," culminated the study. This workshop was offered on November 9, 1977. The intention of this module was to provide teachers and students with an understanding of community influences upon personal health. Here, issues relating to the development of health policy, who shall contribute to its formulation, and how it can best suit all needs were explored.

Implementation

The method of implementation included three phases for each module. That health is individually, situationally, and culturally relative, and determined by people's way of life was the central theme. First, lecture and discussion with teachers conveyed basic concepts necessary for understanding current thoughts in the field of health. The

purpose of lecture and discussion was to ascertain teachers' prior understandings and possible misconceptions relative to health, and to encourage teachers to discuss openly issues or problems concerning the health of the children or the health of the school's environment that could serve as a basis for the workshops. Secondly, various learning activities engaged participants in matters of problem solving, encouraged them to assess students' health interests and concerns, and involved them in the creation of their own materials and method for classroom instruction. Thirdly, participants were encouraged to prepare and teach a lesson in health to their students as a part of a transfer of newly acquired knowledge and attitudes onto the teaching/learning process. Planning units, seeking resources, observation and support were offered by the author.

Evaluation

In order to evaluate the effectiveness of these three inservice modules, questionnaires were distributed to the group at the completion of each workshop. Few tested evaluation instruments exist in the area of inservice teacher training in health at the elementary level. None were applicable to this study. Therefore, the questionnaires were designed by the author with the aid of consultants.

The first section of each questionnaire sought to determine attitudes and knowledge acquisition based on the goals of each workshop. Some statements were rephrased in the three questionnaires in order to examine shifting opinion from one session to the next. This section included approximately ten statements, using a Likert scale of five categories: strongly agree, agree, unsure, disagree, strongly disagree. The context for each statement was taken from the workshop presentations.

The second section was designed in an attempt to elicit participants' reactions to the workshop's organization, content, and materials. Statements were open-ended so the opinions of participants' could be expressed freely. Each questionnaire remained anonymous. This was intended to secure the most candid of responses.

In addition to the questionnaires, demographic information was collected from participants and will be reported. Further, the author kept a log of teacher input during the workshop discussions and learning activities. These responses and additional anecdotal comments from teachers and staff will be included.

Limitations of the Study

This study was designed to provide teachers and staff with an introduction to an educational process for looking at the health of school aged children. The goal

of the program was to effect teachers' attitudes and knowledge as they applied to the differing health levels and needs of children. The development of specific content and modes of instruction were left to the discretion of teachers. For many teachers this inservice program served as an initial exposure to school health. Therefore, modest results were expected. In addition, a commitment of three, sequential inservice days represented a considerable investment of inservice time on the part of Sacred Heart Elementary School staff and administration. Limited time prevented both author and teachers from fully exploring the realm of possibilities for elementary school health teaching.

The individual teaching styles of participants and the established dynamics involved in the teaching/learning process are constraints that were not measured. Also, the evaluation focused on teachers' attitudes and knowledge toward teaching health. Consequently, there is no evaluation of what students will learn. A further restraint is the nature of the setting. Because this program was designed for and implemented in a parochial school, limited inferences can, perhaps, be drawn regarding its application to a public school setting. Finally, the small size of the population confined generalizations about an inservice approach to health teaching.

CHAPTER II

A NEW FRAMEWORK FOR HEALTH

Introduction

Presently, policy makers and educators are beginning to examine how schools might better educate all children in matters of individual health. This examination represents not a new but a renewed interest and concern for that part of the students' learning that has been bandied about the school's corridors and classrooms since the late nineteenth century. Always a "paper priority" when educational goals are written, health teaching has consistently fallen short of attaining its objectives, all but lost its classroom visibility, and more often than not failed the children whose health might later require the treatment which was previously "susceptible to educational intervention."

In 1975, the Congressional subcommittee on Elementary, Secondary and Vocational Education found that

> health education in the school has the potential for enhancing the quality of life, raising the level of health for the student's lifetime by significantly reducing those health problems susceptible to educational intervention, and favorably

influencing the learning process.[1]

That health instruction assumes a more visible position within the educational arena mirrors a growing national tide which views health more as an individual right and responsibility than ever before. It has been demonstrated in recently published books, written in lay language, both the physiological and economic savings inherent in personal health maintenance. Nutritional content labeling, now a consumer protection law, eases the planning for balanced meals. Jogging and bicycle pathways are increasingly included in blueprints for city and town development. These are a few illustrations of ways in which collective groups and individuals are preparing to meet their respective health responsibilities.

There has been a major shift from dependency on immunizations, physician or hospital services to an independence of judgement on what sound health might be and how it should be maintained. Rene Fox described this new emphasis on health as

> . . . indicative of a less fatalistic and more individualistic attitude toward illness, increased personal and communal exposual of health, and a

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[1]U.S., Congress, House, Comprehensive School Health Education Act of 1975, H.R. 2600, 94th Congress., 1st sess., 1976, p. 2-12.

> spreading conviction that health is as much a consequence of the good life and the good society. . . .[2]

One reason for the shifting focus depicted by Fox stems from a public awareness that most health problems faced today are a result of conscious behavior and life style choices. Current trends in the health of America's children, youth, and adults reveal mounting evidence that individuals must assume a greater personal responsibility for their health now and in the future. As health economist Victor Fuchs concluded ". . . the greatest current potential for improving the health of the American people is to be found in what they do or do not do to and for themselves."[3]

On one level, individual decisions about diet, amount of exercise, degree of exposure to stress producing conditions, extent of safety measures that are taken at home, in automobiles and at places of work, all manage to contribute to health integrity. These issues can be determined, to a large degree, by choices. An understanding

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[2]Rene Fox, "The Medicalization and Demedicalization of American Society," DAEDALUS 106 (Winter 1977): 21.

[3]Victor Fuchs, Who Shall Live? Health, Economics, and Social Choice, (New York: Basic Books, 1974), p. 54.

of what health entails, coupled with the incentive necessary to assume self responsibility, and supplemented with information lends plausibility to the notion of health as a "right".

At another level, more socially encompassing factors known to effect our nation's health are institutionally ingrained. These issues are far more subtle and less susceptible to modification by individuals. They include lack of decent and safe housing, patterns of racism and poverty, medical care that neglects or abuses the poor, widespread unemployment that limits the option to buy nutritionally sound foods, and educational practices that are insensitive to human diversity and human needs. Health educator G.M. Hochbaum pointed out:

> We have known for a long time that the health educator's efforts to generate desirable behaviors are often neutralized by poverty, racial and social discrimination, the health care system's failure to adapt itself to people's needs, a food distribution and marketing system that makes unhealthful foods more accessible than healthful foods, health insurance policies that refuse to pay for preventive health services, and a host of other factors.[4]

Whether controlled by individual choices or requiring group commitment to oppose social inadequacies and

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[4]G.M. Hochbaum, "At the Threshold of a New Era," Health Education, July 1976, p. 3.

plan for a system more sensitive to healthful choices, education can facilitate a better understanding of complex health-related issues. Specifically, schools can provide an environment conducive to the development of skills and competencies needed for each student to confront and examine the social and cultural forces, persuasive influences, and options which affect health. If young people, children and youth, can be taught about their individual health during the school years, then they can acquire the knowledge and understandings necessary not only to prevent and minimize health problems but to enhance personal health.

That policy makers and educators alike seek to reexamine how health might better be taught in schools suggests that past curriculum no longer adequately appraises nor fulfills the health needs of todays' students. Differences between traditional and contemporary educational thought regarding health curriculum is discussed widely in the literature.

> Upon reviewing the professional literature it is apparent that the shifting emphasis from traditional 'personal' health topics to more socially relevant topics is the cornerstone separating the past from the present.[5]

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[5]Darrel Crase and Michael Hamrick, "Health Education: A Reexamination of Purpose, " Journal of School Health 47 (October 1977): 470.

Social relevance meshed with emerging knowledge of how all students can assume a greater sense of control over their lives sums this new emphasis on health.

The notion of individual responsibility is a matter that schools can introduce to children at an early age and continue from grade to grade. An inservice teacher training program designed to focus on individuality, cultural pluralism, and the nature of inner city environments can help schools become more responsive to the health needs of all students. Such a program is particularly important for elementary school teachers because these issues do create powerful barriers to the maintenance of sound health and attainment of goals. Education about health can equip children with understandings and knowledge needed to develop the independence of judgement important for breaking through barriers.

What is Health? and Health for What?

Revitalization of health content for schools begins with a scrutiny of what health might mean. Health seems to carry with it personal sets of experiences for each individual and consequently defies a specific definition. A more global and conceptual approach to health for individuals would be based on their own answers to the questions: What is health? and Health for what?

Intuitively most persons seem to understand what being sick entails--we hurt and we cannot function well. Most people also have a rough idea of what is meant by the term ill. A universally recognized sphere of human experience is called to mind.

Individuals usually connect health with illness. One of the few surveys concerned with childrens' attitudes, interests, and questions about health shared elementary school childrens' responses to the question, "What does it mean to be healthy?" A kindergarten child replied, "You don't have measles or mumps;" a fourth grader, "Health is germs;" and a seventh grade student proclaimed, "When you do not need a lot of medicine."[6] Children and adults alike find it easiest to determine what illness is and conclude health must be its opposite.

Even experts in the field are puzzled over distinguishing health from illness:

> To move from a definition of 'sickness' to one of 'health' is, however, not easy. The term connotes bodily integrity, the absence of pain and infirmity, the state of a well-functioning and thus a remarkable organism. In a curious way, like 'goodness', it can

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[6]Ruth Byler, Gertrude Lewis, Ruth Totman, Teach Us What We Want to Know, (New York: Mental Health Materials Center, Inc., 1969), pp. 5-53.

> seem bland, if only because the alternative states of human affairs are so marked by drama and suffering. However bland the concept, the reality it invokes is regarded as eminently desirable. When one is in 'good health' it is not even noticed; when one is not, it is desperately desired.[7]

Authorities seem to agree that health entails a process of continuing, personal sets of experiences which shape everyone's perception of health. For example, the health needs of a desk worker are quite different from that of a twenty-two year old sprinter. A fifty-five year old may be better fit to withstand the rigors of a tennis match than a nineteen year old. Because each of us is unique and encounters diverse situations throughout life, a view of health for one will be very different for another.

Concepts of health are as diverse as those who attempt to formulate them. Robert Wilson intuited that individual health concepts need revision over time. He explained "The notion that health and illness are dynamic patterns, changing with time and social circumstance, leads to the conclusion that judgements of healthiness must by made many times as the life history unfolds."[8]

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[7]Daniel Callahan, "Health and Society: Some Ethical Imperatives," DAEDALUS 106 (Winter 1977): 23-33.

[8]Robert Wilson, The Sociology of Health: An Introduction, (New York: Random House, 1970), p. 8.

Based on the above discussion, a working concept of health then becomes a matter of preparing all children to view their uniqueness as a key ingredient to understanding personal health. Diversity among children is to be valued and encouraged. It should be built upon by teachers as they present a concept of health broad enough so that each child can answer for him or herself what health may mean.

Not only do individuals need to conceptualize independently what health means, they must also attend to what future goals are important and determine whether their health will facilitate the attainment of those goals. In other words, answer the question, Health for what?

A functional adequacy approach is of critical importance because it helps to link judgements about health to the social situations in which people find themselves. Wilson has described a view of health that is relative. "Individuals are evaluated differently and alternative health is recognized, instead of a monolithic health standard to which all must repair."[9] He postulated that personal health evaluations must be measured against specified activities. For example, the health requirements for the urban high-rise dweller might be dissimilar to those of the rural farmer. This approach allows the

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[9]Ibid., p. 5.

wheel-chair bound, the diabetic, or the person with sickle cell anemia to assess their health independent of a normative standard that would otherwise pronounce them less than healthy.

Yet monolithic standards continue to set evaluative trends. They offer a prescribed set of dos and don'ts from which we can measure our health levels. For those who accept norms with ease, there is little difficulty in following such prescriptions. A widely reported research study concluded that better health is significantly related to a number of simple but basic health habits. They are " . . . three meals a day at regular times instead of snacks; breakfast everyday; modest exercise two to three times a week; no smoking; moderate weight; no alcohol or only in moderation."[10]

Clearly, all humans have some physiological and emotional needs that are the same. Where health is concerned, some similar health practices would facilitate these needs. Yet this kind of standard, while applicable to many, neglects those who cannot meet the normative requirements. For example, the person whose day-to-day

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[10]N.B. Belloc and L. Breslow, "Relationship of Physical Health Status and Health Practices, " Preventive Medicine 1 (August 1972): 409-21.

schedule obviates eating three, regularly scheduled meals a day may be less overweight than the person who complies with the prescription. Perhaps sound nutrition has less to do with time frames and more to do with the quality of food one eats.

Refocusing on a functional adequacy approach, educational programs have been developed where such a structure is quite useful for writing goals and objectives related to health. Dr. Norvell Northcutt's program is one example. He looked at the question, Health for what? Northcutt strived to balance individual health needs with the demands of the society within which one must negotiate. He developed a lengthy set of objectives necessary to "insure good mental and physical health for the individual and his or her family."[11] The objectives are broad enough in scope that each student had an opportunity to adapt personally desirable objectives to fit individual needs. The design of this program encouraged each to choose, from a set of options, what must be learned based on answers to the question, Health for what?

As teachers develop an understanding of how to conceptualize health as distinctly different from illness, children too will begin to view health in terms other than

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[11]Norvell Northcutt, Adult Functional Competency: A Summary, (Austin: The University of Texas, 1975), p. 20.

measles, mumps, or germs. To urge young students to answer the question, What is health? brings to mind classroom activities which are both educational and exciting. When students verbalize thoughts stimulated by the question, others have the opportunity to appreciate the creativity involved in expressing an abstraction. Since each expression would be based on personal experiences, varying shared statements would reinforce the notion that uniqueness and diversity are to be valued.

Personal needs and goals are to be pondered as children strive to answer, Health for what? Would those mid-morning hunger pangs abate if breakfast is eaten before going to school? Perhaps an early bedtime is related to the level of energy and number of yawns a child might have the following day. Could eating sugar-loaded candy and drinking sodas have a bearing on frequency of visits to the dentist. When health needs are explored, connections can be made between the need identified and the need fulfilled. Class projects including surveys, diaries and journals offer learning activities that can facilitate the identification of childrens' health needs.

When students are urged to set goals, teachers might help children to see how their health can play a significant part in the attainment of those goals. For example, an aim might be to run a given distance within a

limited amount of time. Achieving such an aim could involve learning which muscle groups must be developed for running the distance and deciding what exercises will strengthen those muscles. Understanding how to balance a diet that is both nutritionally sound and culturally appealing could be another child's goal. A student whose family camps and hikes during vacations may want to prepare a first aid kit. To accomplish this task the student would need to anticipate potential health hazards learn what the care might be and draw up a list of useful supplies. Once goals are self identified, individualized learning projects can be initiated within the classroom and assisted by library materials, teachers, and other resource persons.

Health learning activities for children suggest a process of identifying what health is, and how it is related to what is both needed and desired. Once this process is set into motion, information gathering serves to clarify understandings and to build a base for health knowledge acquisition. As Wilson suggested, answers to the questions, What is health? and Health for what?, are likely to change with time and circumstance. Children will be better prepared to meet the challenges of change as teachers begin to expose students to a health learning

process that advocates self-responsibility for learning, and for health.

What Affects Health?

Individual responsibility is key for confronting many common health problems which face Americans today. Less and less do we see health threatened by contagions. Rather, health is more often thwarted by conscious or unconscious, uninformed choices in life styles and behaviors. These health problems can be treated but only after they have become problems. When individuals are educated and informed about health they possess the understandings necessary to assume responsibility for avoiding or minimizing health problems.

What is the condition of Americans' health and why is self-responsibility so heralded? A brief account of the trend noted in the health of American peoples portrays a condition in which educational intervention may now be more timely than medical intervention.

Manifestations of life style and individual choices currently determine the health status of the population. Historical writings reveal than an infant born in 1776 had only a fifty percent chance of living.[12]

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[12]E.J. McClendon, "American's Health in Two Centuries," The Journal of School Health, 47 (May 1977): 272.

A prayer, printed in the New England Primer, illustrated parental fear for their child's life at that time:

> Now I lay me down to sleep
> I pray the Lord my soul to keep
> If I should die before I wake
> I pray the Lord my soul to take.[13]

More contemporarily, most can recall the horror and devastation done to children by the polio epidemic. Yet in the past two decades, because of substantial scientific, medical and pharmaceutical accomplishments, problems of contagions have been replaced with problems stemming from individual life styles.

The era of infectious disease-oriented medicine has almost entirely been contained. With the advent of vaccinations against polio, diptheria, drugs relieving the dread of pneumonia, scarlet fever, massive infections, the fear of serious childhood diseases that heretofore could devastate now do not. Science and medicine have contributed greatly to the elimination of contagions.

In contrast, the condition of American's health is now conspicuously different. In the United States chances of dying from "normal" disease is very small among

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[13]Paul Leicester Ford, ed., The New England Primer: A History of Its Origin and Development, (New York: Teachers College, Columbia University, 1962), p. 46.

children and youth.[14] Although few children die of disease, the young paradoxically are consciously or unconsciously forming health habits and selecting behaviors which may threaten or endanger their lives at a later time. As Fuchs has noted: "Adolescents and young adults are on the whole extremely healthy. Their strength, energy, capacity to go without sleep, withstand the elements, and shake off minor infirmities are the envy of their elders."[15]

Trends that have been recently noted indicate that the overall possibility of death for youth is not that small, especially for minorities and for males. Children, in general, experience good health. Whereas the threat to youth increases appallingly within a matter of a few years. Four greatest causes of death, ages fifteen through twenty-four are motor accidents, other accidents, suicide, and homocide. Of every 100,000 males, ages 15-24, 2,703 will die from the above causes. Further, of every 100,000 females, age 15, 1,100 will die in accidents before reaching age 24.[16] Yet death by accidents reflect the very activity

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[14] E.J. McClendon, "America's Health," p. 273.

[15] Victor Fuchs, Who Shall Live?, p. 41.

[16] Ibid., pp. 40-3.

of a youthful life style.

Elements that contribute to auto accidents, in general, depend upon what risks children and youth are willing to take. The automobile itself, in most cases, has very little to do with endangering health. More probable elements that could be individually controlled such as speed, alcohol injestion, and substance abuse, are determined by personal choices. Teaching about health cannot directly control the attitudes and choices youth make. But effective and informed instruction may create a mind-set where risks are more seriously taken into account when individual choices are made.

Polio at its worst was responsible for less than 1/20th as many deaths as are now claimed from accidents.[17] Medicine offers few solutions to the complexity of social issues. Germs play no part in death by accidents, or suicide, or homocide. Cardiovascular difficulties are the major health hazard for all adult males and females.[18] Activities leading up to heart impairment such as excessive or high caloric diets, lack of exercise, and smoking are

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[17] Ibid., p. 42.

[18] U.S., Department of Health, Education and Welfare, Health: United States 1976-77 Chartbook, pubn. no. (HRA) 77-1233 (1978), p. 9.

all factors which prior health education may have influenced. The process of education about health would facilitate an identification of the problem and better equip individuals to contend with issues associated with that problem.

For minorities, particularly the black population, health problems are far more devastating. It can sometimes be deceptive to describe health problems only in terms of fatality. Poor health is a serious matter for those who must keep living. Chronic health problems are more prevalent among Blacks than among whites.

> Blacks of both sexes can expect fewer years of life at every age, ranging from the 7.3 year difference between white and black males at birth, to the half year gap between the life expectancies of sixty-five year old males.[19]

Certainly medicine (doctors, nurses and hospitals) fulfills a significant need in the treatment of those who have become ill and those who must continue to live with chronic health problems. But the connection between health and germ-theory medicine is not nearly as direct or immediate as twenty years ago. Polio surrendered to a vaccination. Now the fields of health and, to a lesser degree,

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[19]Arthur Levitan, Johnston, and Taggart, Still a Dream: The Changing Status of Blacks Since 1960, (Cambridge: Harvard University Press, 1975), p. 129.

medicine have moved from the notion of health as primarily prevention of diseases, protection from diseases, or reduction of problems toward a more balanced view of participation in activities and ways of living which generate good health.

Currently medicine is under attack from those for whom it promised to cure and failed. Dr. John Knowles reflected

> . . . the nation is not as healthy as it should be. While some problems result from ignorance, poverty, suppression of civil rights, and unequal opportunities for employment and education, it is thought that medicine can and should assume at least part of the responsibility for preventing, curbing, or curing.[20]

Knowles further asserted that medicine has emphasized a high-cost, hospital-based technology to the neglect of more socially encompassing issues. He protested, however, that the nation must realize medicine's limitations. Authorities have examined the scope of individual health and discovered that far more global influences determine its quality than medicine, alone, can manage. Consequently, efforts are being made to shift the focus from a mode that would treat and cure to one that would educate and inform.

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[20]John Knowles, M.D., "Introduction" to DAEDALUS 106 (Winter 1977) : 1-2.

Sound health is a never ending process of assessments, choices, and actions. When one set of health problems are contained, others seem to emerge. Dubos pointed out:

> Perfect and positive health is a utopian creation of the human mind. It can never really be achieved because man will never be so perfectly adapted to his environment that his life will not involve pain and suffering, and sorrow.[21]

He illustrated his thought further by citing the change from horses to mechanized vehicles as a method of contemporary travel. This alteration in travel all but obliterated the need for stables which served as breeding places for insect vectors. Consequently, the incidence of many communicable diseases decreased. The change to automobiles however is responsible for a corresponding increase in cardiopulmonary diseases.

The condition of Americans' health is much more a matter of attitudes and behaviors that reveal themselves in choices and life styles that are assumed. Self-responsibility is heralded because it is the most outstanding feature central to the major health problems of the day. Medicine has not been designed to manage patterns of behavior which have been built up for a life time. Change

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[21]Rene Dubos, Mirage of Health: Utopias, Progress and Biological Change, (New York: Harper and Row, 1959), p. 281.

theorist, Seymour Sarason, warned to look elsewhere for possible answers when he wrote of problems that get in the way of seeking solutions. One problem is ". . . the tendency to define the problem in a way so as to contain a solution requiring those kinds of professional groups which heretofore had been inadequate in meeting the problem. . . ."[22]

Policy Making Efforts and School Health

School health has been a prime objective of every policy making group in American education. The writings of Henry Barnard, the first Commissioner of Education in the United States, referred to the incorporation of health into the school curriculum and the need to develop health as an independent discipline. Through the efforts of Horace Mann, Massachusetts became the first state to require health as a compulsory subject in all its schools.[23]

Secondary schools, whose organization of the curriculum surrounds specific disciplines, became the logical point of entry for health teachings. The Commission of the Reorganization of Secondary Education specified

> The secondary school should provide health instruction, inculcate health habits, organize an effective program of physical activity, regard health needs in

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[22]Seymour Sarason, The Creation of Settings and the Future Societies, (San Francisco: Jossey-Bass, 1972), p. 141.

[23]Nicholas Calli, "Foundations of Health Education," The Journal of School Health, 46 (March 1976): 161.

> planning work and play, and cooperate with home and community in safeguarding and promoting health interests.[24]

Further support for the inclusion of health in the school's curriculum came when the National Education Association's Project on Instruction recognized that health was a responsibility of the school. ". . . the content of health instruction belongs in the curriculum because such knowledge is necessary, is most effectively learned in the school, and no other public agency provides such instruction."[25]

In 1938, the National Education Association formed the Educational Policies Commission. This Commission identified health education as an essential part of the curriculum stating, "health is necessary in all undertakings--for this reason the school must place great emphasis on health as an outcome of education."[26] By 1959 the Educational Policies Commission had broadened its statements to include elementary schools. The Commission's "Essay on the Quality of Public Education" stated "The elementary curriculum should direct its efforts toward the essentials

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[24]National Education Association of the United States, "Seven Cardinal Principles of Education," (U.S., Department of the Interior, Bureau of Education, bulletin no. 35): p. 32.

[25]National Education Association, Project on Instruction: Schools for the Sixties (Washington 1963): p. 31.

[26]National Education Association and American Association of School Administrators, Educational Policies Commission, The Purpose of Education in American Democracy, (Washington 1938): p. 157.

of safety and personal health. . . ."[27]

The American Council on Education agreed with the NEA's emphasis on health by supporting the incorporation of health into the public school's curriculum. It concluded that general education should guide the student to "improve and maintain his/her own health and take his/her share of responsibility for protecting and promoting the health of others."[28]

Evidence of more recent support for the instruction of health in America's schools stems from the Report of the President's Committee on Health Education, in 1971. The charge of this body was to assess the nation's investments, programs, and effectiveness of health education. This Committee noted that the 59 million school children then enrolled in elementary and secondary schools had no opportunity to participate in comprehensive school health programs. "For these children, there is no health education, or it is lacking in scope, sequence, and commitment of time, money, and administrative support."[29] In addition,

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[27]National Education Association and the American Association of School Administrators, An Essay on Quality in Public Education, (Washington 1959): p. 31.

[28]American Council on Education, A Design for General Education, (Washington 1944): p. 5.

[29]U.S., Department of Health, Education, and Welfare (R. Heath Larry, Chairman), The Report of the President's Committee on Health Education, 1971, p. 15.

the Report noted that of the $75 billion Americans spent annually on health care, about 93% was for treatment of illness, 5% for research, nearly 2% for prevention and just one-half percent for health education.[30] A balance of percentages with greater dollars channelled into elementary school health teaching could significantly reduce those health problems "susceptible to educational intervention."

Widespread publication and distribution of this prestigious Report followed by the President's Health Message to Congress provided the first executive recognition for teaching health in schools. The President identified health problems of Americans today and resolved, ". . . it is in the interest of our entire country to educate and encourage each of our citizens to develop sensible health practices."[31]

As a result of this statement, Federal action was initiated. One outcome was the establishment of the National Clearing House, Center for Health Education located in Atlanta, Georgia. It was created to stimulate,

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[30]Ibid., p. 23.

[31]Richard Nixon, "A Comprehensive Health Education Program," (Health Message to the Congress, February 15, 1971), pp. 1-71.

coordinate and evaluate health education programs. Dollars were allocated to the Center and proposals developed to begin implementation of what had historically been a "paper priority." Thus, health teachings were recognized, valued and financially supported.

In response to the health needs of children, the House of Representatives submitted the 1975 Comprehensive School Health Education Act. The bill accepted health as a unified concept, and health education as affecting the total human being. It was proposed to seek ways for maximizing the unique opportunity provided by the kindergarten through twelfth grade school system in this country.

> Most children and youth of the Nation now do not have an opportunity to participate in comprehensive health education programs, since health education in many schools either is non-existent or is provided on a fragmented and inadequate basis. [32]

Len Tritsch, then President of the American Association of Health Education and Health Education Specialist, State Department of Education in Oregon, presented the following statement to the subcommittee:

> Health education can provide the individual with opportunities to learn to recognize and accept the major responsibility for his own health and partial

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[32] U.S., Congress, House, Comprehensive School Health Education Act of 1975, p. 19.

> responsibility for the health of others. Health education can further assist each individual to understand his behavior through the development and use of a valuing system. Helping people to acquire the tools for adapting to and coping with the environment in which they find themselves is a justifiable reason for developing and implementing Comprehensive School Health Education programs.[33]

The proposed Act failed to pass the House. The economy was in a recession and the mood of the nation looked askance at spending for new programs. The two-day hearings, however, provided a forum for issues surrounding school health education and for those who supported such endeavors.

At the Federal level, school health has enjoyed greater visibility in recent years. Consequently the Center has developed health programs supported by HEW funds. In addition, attention to school health in the form of private foundation grants, legislative action, and recognition of authorities within the field has been accomplished. States have also expressed legislative commitment to school health.

The majority of states have chosen to mandate health programs for schools. Many states have been more specific and have legislated particular subject areas to be taught: Some states have mandated comprehensive school health education: Arkansas, Florida, Hawaii, Illinois,

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[33]Ibid., p. 47.

Maine, Maryland, Michigan, Nebraska, New Jersey, New York, Oregon, South Carolina, Tennessee, Texas, Virginia, and Wisconsin.[34]

In a number of states, specific subject areas may be selected by individual school systems, given community standards. Other states have legislation which offers their school districts the option to provide comprehensive health education programs: Alaska, California, Colorado, Delaware, Idaho, and New Mexico. Still other states have mandated numerous individual curricular areas within health. The overall result resembling a comprehensive program: Kentucky, Massachusetts, Missouri, North Dakota, and Utah.[35]

What is Taught and Who Teaches It

A gap exists between legislative intent and health teachings within most classrooms. Mandates that, on paper, plan for comprehensive school health education are often times quite separate from what teachers are prepared to teach and what children actually learn. Health education within elementary schools depends on both what is being done in the schools and how teachers are prepared to teach

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[34]Anne S. Castile, School Health in America: A Survey of State School Health Programs, (Kent, Ohio: American School Health Association, 1976): pp.13-98.

[35]Ibid., pp. 13-98.

it. Curriculum efforts for elementary schools and elementary teacher preparation are two major areas of concern. Together they provide an historical context for understanding what is being taught and who teaches it.

Health curriculumof the past shared three characteristics: (1) it prescribed; (2) it was narrow in scope; and (3) it emphasized information.

First, the prescription method is clearly recognized as a fault of traditional health curriculum. It often spills over onto curricula found in classrooms today. Health educators have most often developed instructional efforts around subjects perceived to present dangers to society. As a result, the themes in health have been negative. According to Robert Russell, health gained a foothold in schools through the zeal of the Woman's Christian Temperance Union.[36] The Union viewed alcohol as "evil" and lectured to children about the consequences of its use. This theme continues to persist. The Castile survey noted that instruction in alcohol, drugs, and tobacco is most frequently required by state mandate.

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[36]Robert Russell, Health Education, (Washington: National Education Association, 1975), p. 29.

Thirty-five states currently require they be taught.[37]

When these topics are taught in lieu of a conceptual understanding of what health involves, they exemplify a method of instruction that would indoctrinate. The focus of such indoctrination has become a negative rule and lacks suggestions of how students might best determine what is individually desirable. Beyond the insistence that all must conform to a singular prescription, curriculum efforts have assumed a deficit approach. Certain health problems are isolated out and taught against.

> Health education is caught up on a 'revolving critical issue syndrome' moving from one fragmented special interest to the next and back again, failing all the while to develop a comprehensive and coordinated program with substance and meaning for all young people.[38]

Another of the many problems resulting from a prescription approach to health is a sometime discrepancy between what is taught by teachers and the behaviors or images they portray. "I doubt that a grossly overweight teacher will be very successful in involving students in

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[37]Anne S. Castile and Stephen J. Jerrick, "School Health in America: A Summary Report of State School Health Programs," Journal of School Health (April 1976): 220.

[38]Evalyn Gendel, M.D., "Education for Health in the Community Setting" School Health Position Paper, American Public Health Association, 1974, p. 4.

the study of nutrition, heart disease, physical fitness . . . ."[39]

Prescriptions do not encourage student involvement because they are usually intended as inflexible rules. Human needs, diversity among students and the processes of learning and understanding are all violated. A more humane approach would involve teachers and children together exploring health topics related to individual interests, needs, and goals.

Secondly, health offerings are often narrow in scope. A basic issue in health curriculum efforts is the selection of content that is broad enough to include socially relevent concerns. As health educator D. Leviton stated

> Some of us feel that health education should be concerned with more important matters than washing one's hands after using the lavatory. Such areas relating to human health as death and dying, human sexuality, ecology, war, parent education and child rearing. hunger, poverty, and self-actualization are felt to be of greater importance.[40]

When children are encouraged to join in on the selection of health topics, problems of scope would fade. Personal sets of experiences, interests, and concerns would all precipitate a wide range of curricular choices.

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[39]Len Tritsch, "School Health Education Today, As I See It," Health Education (January/February 1975): 6.

[40]D. Leviton, "Education for Death, or Death Becomes Less a Stranger," Journal of Death and Dying (June 1975): 183.

Particularly in urban schools, where a range of diversity among students is most clearly found, the opportunity for varied and rich teaching and learning experiences is infinite.

Thirdly, health instruction has basically focused on presenting information. Usually the information is designed to argue in favor of living in an "approved" manner. The health consequences of deviance serve to substantiate the argument. The American Public Health Association argued that information alone is not enough:

> Education for and about health is not synonymous with information. Education is concerned with behavior--a composite of what an individual knows, senses, and values and of what one does in practice. Factual data are but temporary assumptions to be used and cast aside as new information emerges. Health facts unrenewed can become a liability rather than an asset. The health educated citizen is one who possesses resources and abilities that will last throughout a lifetime--such as critical thinking, problem solving, valuing, self-discipline, and self-direction--and that lends to a sense of responsibility for community and world concerns.[41]

Curriculum efforts centered around a conceptual approach to health afford all students the opportunity to determine what weight health might carry, given a particular moment in time. It will be evaluated and reevaluated over time. Information can deepen conceptual understandings. It makes clearer what is understood and learned. Without concepts, however, health information are facts easily forgotten.

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[41]Evalyn Gendel, M.D., "Education for Health in the School Community Setting," p. 5.

Problems with curriculum only present one side to the picture of teaching health in schools. Another issue involves "Who teaches it" and the preparation of those teachers. For secondary schools, health teaching is more securely in place. Secondary certification procedures require the prospective teacher to major in a specialized, academic area. High schools can hire health teachers who are academically prepared and, in some states, certified. For elementary schools, teacher preparation becomes another of the many issues that impede children learning about health.

> 'Most' elementary teachers at the graduate level have had little or no preparation in school health education. We need more colleges/universities that will pattern their programs after those which provide the opportunity for concentration in school health education. When elementary teachers are adequately prepared, they will devote more time to health education.[42]

At the elementary level, certification requirements in many states, Massachusetts included, do not require teacher preparation in health. Although colleges and universities may include some form of health as a core subject in the first or second year of a college student's experience, few teacher preparation schools offer

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[42]Len Tritsch, "School Health Education Today, As I See It," p. 5.

methods and materials in health to elementary level majors. As a result, elementary children are less apt to receive classroom exposure to health.

Preservice teacher education programs have prepared prospective teachers with knowledge, skills, and understandings primarily in the curricular areas of language development, math, writing, reading, social studies, and science. As the needs of the society shift and, for example, health is affirmed as a subject that should be initiated in the early years of a child's schooling, preparation programs must also shift their design to meet the need. Educator Dwight Allen wrote that formal education should reflect the needs of society:

> . . . shaping the future of education is impossible without acknowledging the social context of education. We can work for educational change, but we must consider that our society is already changing. Our attempts to achieve a synthesis between education and society will be fruitless if we allow the two to run off in opposite directions.[43]

If teacher preparation programs included health theory, methods, and materials, as a part of their programs, new teachers for elementary schools could better share with students the health needs and issues of society. On the other hand, measures need to be taken to prepare

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[43]Dwight Allen, "What the Future of Education Might Be," in The Future of Education: 1975-2000, ed. Theodore Hipple (Pacific Palisades: Goodyear Publishing Co., 1974), p. 8.

those teachers who are now teaching in the classroom. It is unlikely they will leave their positions to make way for new teachers who may be better health prepared.

Employment in teaching positions has consistently fallen off during the last five years.[44] Education has faced a budgeting constriction and a decrease in the numbers of students once enrolled in schools. Those teachers currently working in the nation's schools will probably remain, leaving fewer openings for newly graduated elementary teachers.

> The rates of voluntary separations from active employment probably are being reduced as a result of the increasing teacher awareness of the difficulties they may face in securing employment following an interruption . . . many teachers who normally continue to teach following a move to a new location may not be able to secure employment as readily as in the past.[45]

Just as teachers with classroom experience find it difficult to obtain teaching positions, new graduates encounter an unsympathetic job market.

> For the first time since the Great Depression, there is a vast oversupply of teachers. The universities are adding to the surplus every year. Moreover, although school staffs will shift to some degree, rising

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[44]William S. Graybeal, "Teacher Supply and Demand in Public Schools, 1975," (Washington: National Education Association, June 1976): p. 1.

[45]Ibid., p. 5.

> salaries are making teaching jobs ever more popular. A high proportion of the teachers in the schools now will still be there in five or ten years. Recent estimates indicate that about 75% of the teaching force will be stable in the 1970's, with the balance in constant change. It is thus more important than ever to enhance the quality and reach of inservice training.[46]

Because elementary teachers are likely to remain in schools, inservice education is seen as essential for re-training teachers concerning matters of health that prior preparation neglected. Willard McGuire representing the National Education Association, supported inservice education efforts in health when he wrote "Unless we work with the teachers who are in the field, then a (health) program is doomed to failure."[47]

Teaching Teachers to Teach Health

Because higher education has not prepared those who are now in schools with the necessary health understandings, inservice has an opportunity to reach large numbers of teachers. Teachers themselves have repeatedly indicated their recognition of the need for inservice education. A

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[46]Harold Howe II, "Improving Teacher Education through Exposures to Reality," in New Perspectives on Teacher Education, ed. Donald J. McCarthy (San Francisco: Jossepy & Bass, 1973), pp. 60-1.

[47]Williard McGuire, Testimony before U.S. Congress, House, on behalf of the Comprehensive School Health Education Act of 1975, 1976, p. 86.

1973-74 assessment of teachers' needs undertaken by the National Education Association in twenty diverse local associations reported that inservice education was one of three needs unanimously embraced.[48]

Because of the greater emphasis now placed on in-service education, extensive reviews and further writings have appeared in the literature. One of the most comprehensive reviews of research on inservice education conducted by Lawrence, showed that certain techniques used in planning and implementation produced a number of clear and strong patterns of effectiveness. Many of the findings are applicable to health inservice endeavors. The findings were

1. School-based inservice programs concerned with complex teacher behaviors tend to have greater success in accomplishing their objectives than do college-based programs dealing with complex behaviors.

2. Teacher attitudes are more likely to be influenced in school-based than in college-based inservice programs.

3. School-based programs in which teachers participate as helpers to each other and planners of inservice activities tend to have greater success in accomplishing their objectives than do programs which are conducted by college or other outside personnel without assistance from teachers.

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[48]Roy L. Edelfelt, "Inservice Education of Teachers: Priority for the Next Decade," The Journal of Teacher Education 25 (Fall 1974): 250-52.

4. School-based inservice programs that emphasize self-instruction by teachers have a strong record of effectiveness.

5. Inservice education programs that have differentiated training experiences for different teachers (that is, individualized) are more likely to accomplish their objectives than are programs that have common activities for all participants.

6. Inservice education programs that place the teacher in (an) active role (constructing and generating materials, ideas and behaviors) are more likely to accomplish their objectives than are programs that place the teacher in a receptive role (accepting ideas and behavior prescriptions not of his or her own making).

7. Inservice education programs that emphasize demonstrations, supervised trials and feedback are more likely to accomplish their goals than are programs in which the teachers are expected to store up ideas and behavior prescriptions for a future time.

8. Inservice education in which teachers share and provide mutual assistance to each other are more likely to accomplish their objectives than are programs in which each teacher does separate work.

9. Teachers are more likely to benefit from inservice education activities that are linked to a general effort of the school than they are from 'single shot' programs that are not part of a general staff development plan.

10. Teachers are more likely to benefit from inservice programs in which they can choose goals and activities for themselves, as contrasted with programs in which the goals and activities are preplanned.

11. Self-initiated and self-directed training activities are seldom used in inservice education programs, but this pattern is associated with successful accomplishment of program goals.[49]

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[49]Gordan Lawrence, et al. Guidelines for Developing A Competency-Based Inservice Teacher Education Program, (Tallahassee: Florida Educational Research and Development Program, 1974), pp. 8-15.

Few inservice teacher training programs focusing on health are reflected in the literature. Two programs have received national attention. The first was developed by the New York State Department of Education. It used a model "team" approach to training elementary school personnel in health education. The purpose of the program was to assist elementary school personnel in the implementation of state mandated health education for all school aged children. This program was designed, implemented, and evaluated by the faculty at New York State University.

The training design had a twenty-two session format that spanned a six month period. It included two academic courses of instruction, for a total of six graduate credits. The program emphasized that changes in attitudes and behavior are more important than mere acquisition of knowledge. The objectives of the program were to provide instruction to selected elementary leadership teams concerning the school health program including:

1. The role of the elementary teacher in the school health program;
2. The health of the elementary child;
3. Curriculum development in health;
4. Methods and materials for selected content areas;
5. Program evaluation; and

6. To assist these teams in developing a plan for implementing inservice education for other elementary personnel in their district or school.[50]

Evaluation of the program effectiveness was designed to measure changes in teacher behaviors. Data results revealed that there was a significant increase on the behavioral scale.

A second inservice training program for elementary school teachers which has received national acclaim was first reported in journals in 1974. Supported by the National Clearing House for Smoking and Health, the Elementary School Health Curriculum Project was designed primarily because of the concern for the growing numbers of youngsters who were starting to smoke. The curriculum consisted of three "intensive" units of study; one each at the fifth, sixth and seventh grade levels. Each unit was organized around a body system; lungs and respiratory system for the fifth grade, heart and circulatory system for the sixth grade, and brain and nervous system for the seventh grade. Each unit took 8 to 10 weeks to complete in the classroom. Teacher learning goals included

1. The physiology of the various body systems;

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[50]Alyson Taub and Vivian P.J. Clark, "Training Elementary School Leadership Teams for Health Education," Journal of School Health 47 (December 1977): 615-616.

2. How body systems can be affected by individual actions such as smoking cigarettes, taking drugs, and over-indulging in certain foods and alcohol; and

3. How to take care of the body for maximum health.[51]

The program could be considered a package. That is, units are prepared in books supplemented by equipment, models, visual and media aids, all of which must be purchased by the participating school system or district. The teacher training component consisted of a full-time, two week training period in which teachers are trained by trainers exactly as they would teach children. Here again, a team approach was used, requiring at least three teachers from each school to commit themselves to instructing in health and purchasing the package. This teacher training program was revised two years later to facilitate the growing numbers of districts and teachers who were interested in participating in the project.

The New York State University elementary teacher training program and the Comprehensive School Health Education program were selected from the scant numbers of programs cited in the literature because they represent, in theory and function, two opposing educational viewpoints.

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[51]Roy L. Davis, "New Models for Health Curriculum and Teacher Training," School Health Review (July-August 1974): 34.

The Comprehensive School Health Education program assumed teachers must be trained in methods and given materials exactly the way they themselves will teach children. Professional teachers cannot utilize their own skills in curriculum development or demonstrate practiced classroom teaching techniques. Further, the Project's curriculum assumed all children must be taught the same information. No allowance has been made for modification of content based on the children who make up the school or the needs of the community in which the school is situated.

The New York State University teacher training program has been guided more closely by the principles of effective inservice education. For example, prescribed health content is less the focus than preparing professional teachers with understandings, skills, and knowledge in health. Participants of this program take an active rather than a passive role in creating methods and materials. This program appears to have far more potential for affecting the attitudes, beliefs, knowledge, and understandings because it recognized teachers as practicing professionals and attempted to build upon their existing skills.

There is a need to continue to reexamine and revitalize elementary school health teachings. The inclusion of health in the school curriculum in all grade levels

through policy-making efforts suggests a recognition of need and attempts toward implementation. A conceptual approach to health emphasizes that which is both individualistic and functional. This approach is in contrast to a traditional health education curriculum which prescribed, was narrow in scope, and information-oriented. The literature documents that elementary teachers are, in general, ill-prepared to teach health. Inservice education, therefore, offers a viable approach for presenting concepts, methods, and materials that are relevant to the diverse needs of an ever-changing society. A health program that encourages each to consider and to assess his/her individual health, independently, can prepare each to respond to respective health needs and responsibilities.

CHAPTER III

DEVELOPING AN INDIVIDUAL PERSPECTIVE TO HEALTH

Introduction

This module was designed forand presented to urban elementary school teachers and staff at Sacred Heart Elementary School, Springfield, Massachusetts. The purpose of this first inservice module was to provide a conceptual framework for health that would be useful for teachers and for students at the elementary level. Lecture, discussion, and learning activities were approaches intended to motivate teachers to develop meaningful health lessons and to capture teachable moments based on a concept of health that encourages individuality. Presentation of methods and materials suggested for classroom use supplemented the content presented.

Workshop Participants

Two weeks prior to the workshop, a pre-questionnaire was distributed to the twenty-nine teachers and staff of the school. The pre-questionnaire (See Appendix A) attempted to gather background information from participants including knowledge and attitudes about health, interest in teaching health in the classroom, and perceived student interest in health.

None of the workshop participants had an extensive background in health. According to the pre-questionnaire, two of the twenty-nine respondents indicated having taken a college course in health. Another reported attending a teacher education program that included a health seminar for preservice teachers. That program was the Center for Urban Education Teacher Education Program at the University of Massachusetts, Amherst and had been taught by the author. The following course subjects were considered health related and reported by respondents: Biology, General Science, Food Science, Physical Education, Growth and Development. Sixteen questionnaires revealed no college preparation in health or health related subjects.

If any health related programs, courses, or workshops were attended and pertained to teaching elementary school children, respondents were requested to list them. One reported attending a seminar on aging, six reported previous enrollment in first aid courses, and nutrition workshops were listed by four. Nineteen reported a "none" for the statement.

Teachers and staff at Sacred Heart Elementary School represent a wide range of classroom teaching experience. When asked how long each had been working with children in schools, thirteen stated 0-5 years, five stated 5-10 years, five stated 10-20 years, and six stated 20 or

more years. Most reported having taught more than one grade. Current teaching grade assignments spanned kindergarten through eighth grade.

Those teachers who were teaching grades kindergarten through fourth felt nutrition and hygiene were subjects that should be taught to students. The variety of health topics teachers felt should be taught increased considerably for grade assignments fifth through eighth. They included safety, first aid, diseases, dental care, sex education, smoking, drugs, and alcohol. According to respondents, children have voiced interests in learning about food, how the body works, disease, puberty, drugs, sex-education, and smoking.

The final portion of the pre-questionnaire asked for reactions pertaining to perceived knowledge, interest, and willingness to teach health. Over half felt their general knowledge of health was above average. The majority felt their personal interest in health was strong. Additionally, an above average number stated a willingness to teach health.

Pilot Workshop

At the University of Massachusetts (Amherst) three weeks prior to the inservice workshop, the author conducted a video taping session of this workshop. Five individuals volunteered to participate in the session. All who

participated had experience with elementary level children in schools, and three currently teach in elementary schools. Each participant evaluated the content and activities for clarity and relevance at the completion of the session. This was accomplished through participants anecdotal comments. The pilot presented the same content and activities planned for the inservice workshop. Some material needed to be deleted in order to maintain the two-hour inservice time constraint. A replay of the video tape with comments and questions was useful in shaping the final presentation.

Consideration of the pre-questionnaire reflecting teacher and staff background, interest, and knowledge, combined with the pilot session, provided a framework upon which the workshop was constructed. Variations and some reworking was necessary to fit the expressed needs and interests of Sacred Heart Elementary School teachers and staff.

Workshop Content

The workshop was designed to meet an overall set of objectives which would provide teachers, as individuals, with a way to explore health and would also provide concepts appropriate for teaching children in the classroom.

For teachers as individuals, a portrait of health from mythology contrasted with current thought was intended

to provide alternatives for each participant to explore, independently, what health may mean. An introduction of alternative philosophies concerning who should control the health of groups and/or individuals was presented to stimulate each to consider specific health-related circumstances from a new point of view.

The workshop also attended to the needs of teachers as teachers. Specifically, techniques for eliciting health interests and concerns of students were offered, potential resources were presented, possible teaching strategies suggested, and a method for evaluation of content provided.

Learning goals for participants were

1. Participants will understand how health was historically perceived.
2. Participants will understand that an individual view of health involves each person interacting with the environment, their risk-taking ability, and individual adaptation.
3. Participants will understand a range of philosophy that can be the basis for any attempts to educate about health.
4. Participants will understand that teachers need to encourage each student to develop a view of health based upon unique sets of experiences, needs, and personal goals for the future.

5. Participants will understand the necessity for initiating health teachings at the elementary level.

The content selected for presentation embodies three major areas. The first area concerns the environment or external influences that must be recognized and accounted for in order to understand personal health. Secondly, adaptation is considered as a mechanism that helps to shape individuality. Thirdly, growth and development is presented as a process that involves a certain amount of risk-taking. Such risk-taking can be considered dangerous or rewarding but is none the less essential to an individual's health. Literature has been provided which supports the inclusion of the above mentioned areas in a discussion of individual health.

Environment

An understanding of environment encompasses two distinct systems and their relationship to one another. On one hand, the system of the individual--his/her physiology, emotions, and ability to think--constitutes an internal environment. From birth to adolescence to adulthood to old age, the internal environment is constantly changing. In all phases of life, individuals are generally equipped to meet the challenges of an external environment. This external environment, on the other hand, can be considered the world in which a person functions. Conditions in the external

world are also in a continuous state of change.

Sound health is theoretically achieved when both internal and external environments are maintained in harmony.[1] Disharmony results when conflict between the two arises. The sting of a bee produces a painful allergic reaction. Chilling, cold weather automatically triggers a shivering response. An inadequate diet leads to nutritional deficiencies. Breathing the smoke of a fire stimulates a cough and tearing of the eyes. Thus, certain responses to external conditions of disharmony are common to all. Other internal responses to the external environment will vary from person to person. Some will react to fatigue or a climate change by developing a cold. Others greet the presence of pollen with sneezing. Urban crowding stimulates anxiety and fear for many, while being alone creates a similar response for still others.

Community and culture also play a significant role in shaping an individual's internal reactions to an external world. "Community influences the body and mind of a child through nutritional habit, hygienic practices, customs and tradition."[2] What is valued for one community or

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[1] Rene Dubos, Mirage of Health, p. 110.

[2] Rene Dubos, Beast or Angel? Choices that Make Us Human, (New York: Charles Scribner's Sons, 1974), pp. 31-32.

culture may be rendered less important to another. In some cultures, the experience of pain is met with emotional outbursts that express the anxiety or fear which is felt. Certain societies or cultures view stoicism, a seemingly indifferent or impassive expression of pain, as valuable for dealing with similar fear or anxiety.

Values may vary within communities or cultures over time because of changes within the external world. For example, obesity today is considered responsible for a great susceptibility to disease and a short life expectancy. Whereas the same condition may have been more advantageous in the distant past when supplies of food were erratic and people had to depend on body reserves for survival.[3]

An individual responds in a variety of ways to the external world. Both internal and external environments are in a continual state of flux so that when disharmony occurs, the internal response called on is most likely to differ depending on the best matching between the two. Just as individual responses vary, responses from person to person will also differ.

Constant interaction of an individual's internal responses with the external environment creates a series

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[3] Rene Dubos, Man, Medicine, and Environment, (New York: The New American Library, 1968), p. 103.

of on-going experiences which set each person apart from the other. Community and cultural shaping further influence personal experiences and perceptions of the world. Students, as individuals, share a common environment but each may also be part of a certain culture or community whose practices and values are distinctly different. Individual diversity needs to be considered and encouraged through health lessons that allow for differences, and teachings which invite the sharing of uniqueness.

Adaptation

The continued and successful interaction between internal and external environments is a consequence of each individual's adaptive potential. For humans, adaptation implies a fitness and ability to function within a particular environment.[4] The eye is a simple but clear example of common adaptive ability. During the bright of day, the pupil is fairly small, narrowing and filtering the amount of light necessary to see well. In the darkness of night, the pupil becomes larger or dilates permitting the greatest amount of light present to be absorbed. Thus, our eyes adapt to day and night enabling the individual to function in both conditions. Humans and animals possess numerous physiological adaptive responses.

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[4] Ibid., p. 106.

A feature more unique to humans is the ease with which the environment is manipulated to best meet needs and desires. People can change their surroundings so that adaptation is made easier by wearing the proper kind of clothing, planting trees for shade, storing and preserving foods. Technological developments also serve to ease human need. Individuals can use a tooth brush to protect their teeth, wear glasses for better sight, heat homes and air condition offices for greater comfort, eat prepackaged foods to save time, and diminish physical exertion by riding in cars. Yet what people use to help them adapt and make life more comfortable, may be a threat to future functioning.

Environmental manipulation can also interfere with personal health and the achievement of goals. The convenience of heating a home or air conditioning an office reduces the body's ability to adapt to a wide range of temperature conditions. A person may only feel comfortable within controlled and narrow climatic ranges. Preservatives found in pre-packaged foods stop spoilage but the same preservatives may cause allergic reactions. Automobile use deprives many people of physical exercise that is necessary. In many instances, individuals attempt to eliminate what is considered unpleasant within the environment. As a result, the social and environmental manipulations that were originally intended to make adaptation easier, may now limit

one's ability to function and can create future health problems.

As each person begins to assess his/her own health needs, it is important to recognize how adaptive abilities can best serve those needs and goals. People can, in many instances, modify their interactions with the environment by understanding the options and choices available.

> Adaptation can range from the very active, vigorous attempts to change some aspects of things (i.e., culture, physical environment, and other living things) to the very passive acceptance of things as they are.[5]

Walking to and from school or work on warm days may be an alternative that provides physical exercise. Moments of silence and decreased stimulation can be achieved amidst urban crowding. Five small meals a day that are modest in calories could decrease a sense of ravishing hunger. Changes in behaviors can be achieved when goals are set and alternatives are available. Teachers and children can create their own lists of approaches, options, and choices to any health related situation. These lists might represent a rich variety of responses and perspectives because they would be based upon individual health needs and future goals.

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[5]Robert Russell, Health Education, p. 140.

Risk-Taking

For all individuals, adapting to the world around them involves continuous risk-taking. Certain tasks that are challenging because they have not been tried before can help to develop one's physical prowess, thinking and creative abilities, and emotional composition. The first steps taken by a toddler thrills his/her parents, even if the child stumbles or falls. The transition from a tricycle to a bicycle demands from its rider a greater sense of balance and is therefore a more threatening and challenging task.

The assessment of one's own health apart from established dos and don'ts presents a departure from convention and is a process which may or may not carry with it some risk. A four year old child climbs a five foot fence to walk along the flat but narrow boards at the top of that fence. There is risk involved in this venture because that child could fall and be seriously hurt. But if the challenge is successfully met, eye-foot coordination and psychological self-assurance for this four year old could be greatly enhanced. The risks that are naturally juxtaposed to the new and unknown usually call to mind the fear and danger that may be involved before potential benefits are considered. We are afraid for the fence walking child while we watch the incident occur. It is

only after he/she has met with success that we are able to recognize and appreciate the child's achievements.

A teacher's insistence that a student wear his/her coat during recess on a cold winter's day is an example of how children are insulated from self-learning because of potential lingering risks. The student is protected from the possibility of being chilled but is prevented from drawing a connection between being chilled and wearing a coat for warmth. The experience of being cold may have generated a situation in which personal learning could have been more meaningful and long lasting because the student encountered a circumstance where the connection was his/her responsibility. Dewey recognized that "since learning is something that the pupil has to do himself and for himself, the initiative lies with the learner."[6] If the experience is removed because risk is present, learning may be denied.

Issue by issue, teaching for and about health has usually opted against risks. It has almost always had the ". . . face of conservatism and not imaginative risk-taking."[7] Lessons concerning puberty usually focus

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[6]John Dewey, Experience and Education, (New York: MacMillian, 1938), p. 36.

[7]Dorothy B. Nyswander, "The Open Society: Its Implications for Health Educators," Health Education Monograph 22 (June 1967): 4.

on the joys of adolescence and de-emphasize the awkward and uncomfortable physiological and emotional changes that accompany growing up. Subjects such as acne, body odor, voice change, hair growth, or uncontrolled crying that plague and distress adolescents are avoided or treated with less significance than the ensuing responsibilities these children-adults are told they must prepare for. Teachers themselves must be prepared to risk presenting issues that are uncomfortable, untried, or yet unknown in order to involve students in imaginative and creative health learnings.

Many real pleasures, exciting experiences, and true accomplishments result only from taking risks. It seems natural for adults to want to pass on to children experiences and learnings collected over the years. Conservative, learned behaviors that may have protected the health of an adult, could interfere with a child's developing individual health practices based on their experiences where risks are involved. "Consistently cautious behavior can stunt a person's functioning."[8] For this reason, Alison Stillibrass encouraged teachers and adults

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[8]Robert Russell, Health Education, p. 103.

to provide children with the opportunity to take risks.

> At every age children must, as far as possible be allowed and encouraged to make full use of the powers they have, because only by using them can further powers be developed.[9]

The experience of the adult-teacher may be of less use to the student than the independently learned health practices drawn and shaped from individual experiences and choices.

Participant Learning Activities

This workshop was designed to balance the introduction of unfamiliar concepts and information--via lecture and discussion--with participant learning activities that placed teachers in an active role. The lecture format, alone, usually accomplishes a ". . . discouragingly small percentage of specified goals."[10] Therefore, the overall goal of the workshop was to follow lecture-discussion materials with activities intended to encourage teachers to work together to consider present behaviors along with possible alternative behaviors in a setting where they themselves could provide one another with mutual support

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[9]Alison Stillibrass, The Self-Respecting Child (London: Thames and Hudson, forthcoming).

[10]Vilma T. Falck, "Involvement for Learning in Health Programs," The Journal of School Health 48 (March 1978): 168.

and feedback. It was felt that mutual support would be useful for the generation of ideas and materials for health lessons. The following activities were chosen to support the concepts and information introduced in the workshop.

Activity One--What Does Health Mean to Me?

Objectives

This activity was intended to:

1. Introduce participants to a concept of health that is individually determined;
2. Describe how health can be distinguished from illness;
3. Offer participants the opportunity to express what health may mean to them; and,
4. Demonstrate that meanings of health differ through the sharing of these expressions to the group.

Procedure

Following a presentation of basic concepts concerning individual health and a description represented in mythology that portrays the attainment of individual health through "balance and reason,"[11] participants were

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[11]Rene Dubos, Mirage of Health, p. 132.

asked to (1) identify on 5 x 7 cards what health means; share these expressions with the group, discussing how each may differ; and (2) further discuss how health meanings can vary for students.

The following are selected expressions which were shared with the group:

1. "Health, to me, is when the parts of my body--blood, muscles, skin, heart--are in harmony with my spirits. If my emotions are lopsided, it means there is still a lack of harmony with my inner spirit."

2. "More recently, I have been concerned about my health. It is hard to say what it means to me. I guess, basically, it means not consciously doing anything that may be harmful to my body. By doing this I may not be healthy at all times, but by taking preventive measures, I can lesson the chances of being sick or otherwise being detrimental to myself."

3. "Being able to function and perform daily activities with plenty of energy and a feeling of well-being. To have the ability to meet physical and emotional challenges if they arise. To be relatively free from illness, excess weight, exhaustion, but in general to feel a sense of vitality and energy."

4. "Health is the ability to perform one's obligations to family and society and self in a comfortable capacity."

5. "Health is feeling well physically and mentally. Without the balance, no matter how well you take care of yourself, stress can cause you to be unhealthy."

6. "To me, health means the ability to function satisfactorily in the work I am responsible for and also in the non-work that is my own.

If this can be done on my own, fine. But if it requires the aid of medication this is second best."

7. "Health is physical and emotional happiness of an individual relative to his perception of what constitutes 'well-being.'"

The sharing of these expressions with the entire group became a personal and intimate experience for most. As each participant revealed his/her thoughts or struggled with the meaning of health, others offered support and encouragement. It became clear that health held a distinct meaning for each participant. It was unamiously agreed that health was highly valued by all. Yet the shared expressions and later discussions indicated that prior experiences, how much one had thought about his/her own health, age, and ability to function and accomplish personally defined goals, uniquely shaped how each person thought about and valued health.

Participants understood that just as they as a group thought differently about health, so then would the children they teach. One participant suggested that the workshop group was probably more homogeneous than the students within the school. Therefore, the students' ideas and values concerning health would vary even more. It was concluded that health materials and methods must be diverse if student needs were to be met.

Activity Two--How Shall the Health of Others be Controlled?

Objectives

This activity was intended to:

1. Introduce a philosophical range which could be the basis for any attempts to educate about health;
2. Suggest that each health-related situation might require a different teaching approach;
3. Develop an understanding that each child's uniqueness should be considered when teaching about health; and,
4. Introduce the notion that some health teachings can be directed by teachers while others need to be directed by students.

Procedure

Following a presentation of the range of philosophy that at one end states "The individual is capable of avoiding or solving his/her own problems," is bridged by "The individual can avoid or solve some of his/her problems but needs the teacher's help with some," and concludes with "The individual cannot avoid or solve his/her own problems and must have help from teachers,"[12] participants were

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[12]Robert Russell, Health Education, p. 82.

asked to: (1) generate three separate lists of health issues or problems that are found within the school; (2) divide into small groups and compare the philosophies with identified issues or problems; and (3) reconvene to discuss the findings and possible teaching approaches.

Within the group as a whole participants felt certain topics should be left to student learning through experience. These included issues or problems such as nail biting, some matters of personal hygiene, warm clothing, coping with home life, leaning back on chairs, and the expelling of gas. They suggested that these issues could be dealt with on a teachable moment basis, or that advice could be offered to the student, apart from the class as a whole. Generally speaking, these were believed to be circumstances in which students should have the opportunity to self-determine the choices they would make.

Some circumstances might be considered personal responsibility but, at times, impinge upon others. In these instances, teachers could handle the situation by taking the student aside and utilizing the teachable moment technique or could introduce the issue as health material for all children within the classroom. Participants generated the following for this category: eating what could be considered "junk" foods, sickness or

death within the family, coming to school sick, hand washing, body odor, play-ground safety, first aid, loss of temper, going to bed early versus being tired in school.

Participants concluded that some health issues should be directed by the teacher and clearly emphasized to students as a set of rules that should be followed for the benefit of all children within the school. These areas could become a part of health lessons initiated by the teacher with a focus on providing information, encouraging certain behaviors, or explaining why consistency was of value for all children. Included in this grouping were hurting other children, noise levels within the classroom, fighting, running in the halls, fear of shots, throwing supplies or dangerous items, and washing off the desks after eating lunch.

The discussions revealed that teachers would approach students in different ways depending upon the circumstances and the student. Generally, participants were receptive to the notion that each situation should be weighted differently and there was recognition that risk-taking and some learningscould be initiated, thought through, and a course of action could be taken by students themselves.

Activity Three--What and How Shall I Teach about Health?

Objectives

This activity was intended to:

1. Review a list of materials suggested for use in teaching about health;
2. Review a health resource booklet of educational materials; and,
3. Introduce a method of evaluation for appropriate materials.

Procedure

Following the distribution of materials, participants were asked to discuss alternative resources for materials and references, and generate a list of teaching techniques applicable for the classroom.

As teachers became more interested in developing lessons or units in health, the following techniques were suggested. These methods were designed to elicit information from children about their health concerns, interests, and possible problems. Examples of lead-in questions for using the following methods were, "What does good health mean to you?" or "What would you like to know about health?" or "What puzzles you about your health?" or "Why do you think you're healthy?" From the following, ideas for a lesson or unit might emerge thatare student-centered

and appealing.

Discussion.--Teachers lead small sized groups with emphasis on an informal, relaxed, and non-critical atmosphere. Support should be given for all responses. Peer group discussions and buzz sessions are suggested for upper grades.

Observation.--Teachers may want to take notes of what students said or did in undirected play activities. This may be especially useful for the primary grades.

Life Situations.--The birth of a baby could provide an opportunity for exploring the concerns of young children. Similarly, current issues such as the mandatory use of seat belts in autos may provoke varying responses or points of view. Teachers are encouraged to facilitate discussion but to resist giving answers which would close off sharing.

Free, Anonymous Writing.--Students are encouraged to write their thoughts freely following group discussions.

Incomplete Story.--Teachers may want to create a health-related story to the point of a problem as a means of opening discussions.

Dramatization.--Children in the primary grades frequently reveal feelings and interests through playing out a story initiated by the teacher.

Role Playing.--This is similar to drama but concentrates on a problem with the hope of solving it collectively.

Finally, structured checklists or questionnaires are not advised because they may indirectly suggest to students what they ought to be interested in, and could easily inhibit the creative, individual responses students could offer.

A health resource booklet was compiled by the author for the purpose of demonstrating to participants the variety of educational materials that are available free or at low cost (see Appendix B). These materials are applicable for grades kindergarten through eight. Information and illustrative materials concerning many of the subjects mentioned by participants are included. Sacred Heart Elementary School does not provide health texts. It was therefore important to show the ease with which exciting and creative materials could be obtained.

In a brain-storming session that followed the distribution of the booklet, participants generated their own list of potential resources readily accessible to students and to teachers. Some ideas were the school's library, Springfield's public library, community-based health

organizations, parents who are involved in the health professions, and the school nurse.

Finally, mechanisms for evaluation of health teachings were discussed. An evaluation instrument designed to help teachers assess the educational value of materials they may collect was distributed (see Appendix B). Additionally, consideration was given to measurement of student learnings. Because every child will individually assimilate behaviors, attitudes, and knowledge differently, each student should be evaluated independently. This can be done through on-going observation on the part of the teacher. Behaviors and attitudes cannot be expected to change immediately. Rather, it is a continuous process that should be viewed as similar to physiological growth and development. Some students grow six inches in one academic year, while others will grow two to three inches in the same year. Health values, attitudes, behaviors, and individual responsibility for health can be evaluated only in terms of a gradually evolving process.

Evaluation

At the completion of the workshop, participants were requested to give their reactions to a questionnaire specifically designed for this module. The questionnaire (see Appendix C) contained two sections. In the first section, eight statements were constructed to determine

participant's attitudes and knowledge based on workshop goals. A Likert scale of five categories: strongly agree, agree, unsure, disagree, strongly disagree was used. Content for each statement was taken from the workshop presentation. The purpose of the second section was to provide each participant with an opportunity to comment in an open-ended manner.

The data and results for the first section of the questionnaire are presented in two tables. Table 1 indicates the overall responses and assessment of the participants to their knowledge, attitudes, and understandings of an individual perspective to health. Statements comprising the knowledge category were items 1, 2, and 8. The overall response is positive ($\underline{M}$ = 3.4). Items 3, 4, 5, 6, and 7 comprise the category concerned with teaching children about health. Participants felt less positive regarding teaching children about individual health ($\underline{M}$ = 2.6). This may be due to the fact that teachers have not yet attempted to teach health. The data results might also be related to responses from the pre-questionnaire that indicated teachers felt the health knowledge of students was well below average. Finally, Table 1 indicates that the participant's overall response to the workshop was slightly negative ($\underline{M}$ = 2.8).

TABLE 1

SUMMARY OF CATEGORIAL RESPONSES FROM THE "DEVELOPING AN INDIVIDUAL PERSPECTIVE TO HEALTH" EVAULATION INSTRUMENT

Category	Mean	Standard Deviation
Participants' response to their own knowledge and attitudes about individual health (Items 1, 2, and 8)	3.4	.51
Participants' response to teaching children about individual health (Items 3, 4, 5, 6, and 7)	2.6	.48
Participants overall response to an individual perspective of health (Items 1 through 8)	2.8	.38

Table 2 presents participants responses to each of the items on the evaluation instrument. Five of the eight statements revealed a positive group response (1, 2, 6, 7, and 8). Statements 3, 4, and 5 indicated negative responses. These three statements are based upon the range of philosophies presented that focussed on complex value judgements. These negative responses may have resulted from participants not having had sufficient time to clarify their judgements.

The second section of the evaluation sought to elicit participants reactions to the content, organization, and materials of the workshop. Questions were open-ended to provide an opportunity to express opinions freely. The following selected responses reflect the groups' reactions:

1. Have you found the health resource booklet and materials presented useful? If so, how?

> "As principal, I found them a helpful resource for the staff."
>
> "Right now I haven't really had an opportunity to use the materials. I feel they are interesting to me now, and can be useful in the future when teaching."
>
> "Yes, I have sent for the information. Hopefully this will interest the students towards discussion."

TABLE 2

SUMMARY OF PARTICIPANTS' RESPONSES TO ITEMS ON "DEVELOPING AN INDIVIDUAL PERSPECTIVE TO HEALTH" EVALUATION INSTRUMENT

Statement	Number	Mean	Standard Deviation
1. Today, individual health is influenced more by life style choices than by diseases.			
Strongly Agree	2		
Agree	12	3.8	.81
Unsure	2		
Disagree	2		
Strongly Disagree	0		
2. Historical perceptions of health (Hygiena and Asclepius) are useful for developing modern day goals for individual health.			
Strongly Agree	2		
Agree	11	3.8	.62
Unsure	5		
Disagree	0		
Strongly Disagree	0		

TABLE 2 Continued

Statement	Number	Mean	Standard Deviation
3. Individuals should make their own health choices, despite the outcome.			
Strongly Agree	1		
Agree	3		
Unsure	8	2.8	.96
Disagree	5		
Strongly Disagree	1		
4. If an individual chooses an unhealthy course, you should intervene.			
Strongly Agree	0		
Agree	10		
Unsure	7	2.5	.62
Disagree	1		
Strongly Disagree	0		
5. Decisions about individual health must be based on what is best for all.			
Strongly Agree	1		
Agree	6		
Unsure	5	2.9	1.0
Disagree	5		
Strongly Disagree	1		

TABLE 2 Continued

Statement	Number	Mean	Standard Deviation
6. Teachers should encourage children, at every level, to base their own health decisions on personal needs, experiences, and future goals.			
Strongly Agree	2		
Agree	13		
Unsure	3	3.9	.53
Disagree	0		
Strongly Disagree	0		
7. Each person must take risks in order to understand their own health needs.			
Strongly Agree	1		
Agree	8		
Unsure	5	3.3	.90
Disagree	4		
Strongly Disagree	0		
8. Inner city environments encourage individuals to develop their adaptive abilities.			
Strongly Agree	1		
Agree	11		
Unsure	4	3.6	.77
Disagree	2		
Strongly Disagree	0		

"It will be useful as reference for when the need arises. Not having a homeroom of subjects that deal even indirectly with health minimizes the present need."

2. Do you feel you were adequately involved in the workshop?

"Yes, I feel the workshop had a good balance of participation and direction."

"Yes, but too long for after school hours."

"Yes, I feel I learn more when the material is presented to me because it gives me a chance to digest it and form my opinions before I actually participate."

"Yes, there was plenty of time for discussion."

"Because I know so little about health, I don't know if I need to be really involved in the workshop itself to learn. I'm happy to gather information first, think about it, and then get involved."

"Yes, but participation should not be forced upon members of a large group by embarassment of implied waiting so everyone feels they must answer."

3. List what you consider the strengths of the workshop to be.

"The opportunity for discussion and small groups."

"Encouraged to be aware of the problem."

"Very well prepared and planned for."

"The greatest strength at any of our workshops is the faculty. The atmosphere is relaxed, friendly and open. You add to that."

"The background of health and medicine; small group discussion."

"Excellent preparation and a great deal of material presented to us."

"Your enthusiastic personality and earnestness."

"Good source of resources to enhance classroom teaching of health."

4. Were there weaknesses that you feel could be improved upon?

"When held after school, I think an hour would be sufficient."

"Ideas on how to initiate health unit in classroom."

"I feel it was too long. One and one-half hours would be better."

"Too much small group activity."

"The thing I would like to see covered in great detail is how we can use the information to help the children form better health practices."

"Conducted at too elementary a level. Did not feel we learned anything new or different."

Summary

In general, verbal reactions to the workshop were positive. Participation in learning activities was responsive and, at times, creative. Teachers seemed unafraid to name health problems or issues found within the school and speak openly about how these could be approached and

possibly solved. Students' feelings, attitudes, and differences were taken into account, with some responses indicating a greater concern for children's individuality than recognized in the past. Additionally, teachers as individuals expressed personal concerns and appeared interested in trying on new proposals for health. The principal actively participated in discussions and activities, lending support and encouragement to staff members as they ventured into an untried arena.

Just as teachers must consider evaluating student changes in behaviors and attitudes in terms of differing growth spurts, so too must individual participants be evaluated. Some remained reserved and in the background during the two hour workshop. Perhaps these are the participants who wrote they would prefer to think or consider and react later. Others were most vocal and were open to alternative attitudes concerning their health and how they might teach children.

Given one two hour workshop, drastic change cannot be expected. The overweight eighth grade teacher would not be expected to initiate a diet the following day. Smokers will most likely continue to light their cigarettes during recess break. Those teachers who believe all students must wear coats to recess will probably continue their practices.

For some teacher-participants, health will become a viable classroom subject. Lessons will be introduced and activities for children begun. It is hoped that for those children, a meaningful understanding of individual responsibility regarding personal health will grow and evolve and provide each with a greater sense of power and control over their health, lives, and future goals.

CHAPTER IV

A MULTICULTURAL PERSPECTIVE OF HEALTH

Introduction

The second of three inservice workshops conducted at Sacred Heart Elementary School was entitled, " A Multicultural Perspective of Health." Twenty teachers and staff attended after school, during monthly time allotted for inservice. The module aimed to build on the concepts and information presented in the first workshop by providing an appreciation and understanding of cultural diversity as it related to health. A multicultural perspective of health within an urban setting is essential for viewing each child's distinct and separate needs. Small group buzz sessions and large group presentations and discussions helped participants select health topics and teaching approaches appropriate for initiation within the classroom.

Multicultural Concerns and the School

During the Fall semester of 1977, Sacred Heart teachers and staff were anxious and concerned about some overt racist behaviors among students and parents. Because of a reorganization of elementary schools within the Springfield diocesses, Holy Family Elementary School had been closed the preceeding semester. As a result, approximately

one hundred students were transferred to Sacred Heart. Nearly ninety-five of the new students were black. Consequently, six white children were removed from Sacred Heart by their parents and reenrolled in other schools whose student composition reflected greater numbers of white students.[1]

Two related sets of dynamics concerned teachers and staff because of the increased number of minority children in the school. First, new students needed to feel welcomed. Organized activities were planned to help those children feel more comfortable in their new school. It was hoped that an inappropriate sense of ownership on the part of "veteran" children would not cause conflicts or animosity. Such circumstances could develop into real or felt racial strife between students. Secondly, due to learned racist behaviors among certain children who had been attending Sacred Heart, teachers and staff believed these behaviors could precipitate conflicts which would endanger human relations within the school community.

Of the twenty-nine teachers and staff, one third grade teacher was black. Many of the faculty members were anxious over their relationships with minority children and

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[1]Sr. Rose Marie Ryan, Principal, interview held during a meeting at Sacred Heart Elementary School, Springfield, Massachusetts, June, 1977.

how they might deal with potential student conflict. In general, Sacred Heart welcomed the opportunity to attend an on-site inservice workshop that emphasized cultural diversity. Faculty seemed eager to gather information and to develop attitudes and understandings that would facilitate teaching effectiveness between themselves and students, and greater communications among students in the school.

Workshop Content

This workshop was designed to meet an overall set of objectives that would provide teachers with a framework for exploring multicultural issues, particularly as they related to individual health. Concepts and information were offered that focused on teacher attitudes and beliefs which could be transferred in the classroom to children. Specifically, the overall objectives were (1) to communicate multicultural health understandings through lecture and discussion; (2) to apply concepts presented in the first module to the newly communicated material; (3) to identify and discuss health problems, issues, and concerns within the school; and (4) to develop teaching strategies and lessons that attended to and encouraged cultural diversity.

Learning goals for participants were

1. Participants will understand how cultural diversity impacts upon each child's view of health.
2. Participants will learn that the interactions

between environment and heredity or culture are influential to individual health.

3. Participants will understand how the health of all children is influenced, in part, by economics.

4. Participants will learn how the teacher-identified health concerns and issues of children within the school can be approached in ways that encourage cultural diversity.

The content selected for inclusion in this module was designed to build on ideas previously presented. Further concepts and examples were intended to link appreciations for individual diversity with an appreciation of cultural diversity. Two major areas were stressed. First, some health matters are culturally, hereditarily determined and environmentallly influenced. Secondly, economics or income are shown to be closely related to an individual's health. Economic stability does not necessarily assure sound health. Certain health problems are related to those who can be considered economically affluent, while other health problems are typically problems of the poor.

Inheritance, Environment, and Cultural Influences

For students and teachers in urban schools, the controversial issues surrounding environment versus heredity have seemed as intimately related to health as they are

related to potential educational attainment. Some research has indicated urban environments with tense life styles, crowds, noise, dilapidated housing and fenced, cemented playgrounds create significant environmental barriers to positive health. Other research has emphasized heredity factors such as sickle cell anemia, inability to digest milk, and Tay-Sachs disease as profoundly limiting.[2] Because certain health and disease problems show up or are reportedly related to poverty or ethnic backgrounds, urban environments seem peculiarly associated with poor health.

As sophisticated urban educators are beginning to realize, the dichotomy between heredity and environment, nature versus nurture, is not very useful for looking at educational potential or health. Certain characteristics are passed on from generation to generation through the transmission of "genetic coding." Most characteristics are relatively stable and common to all. For instance two eyes, a four-chambered heart, the suckling instinct of an infant, stable body temperature, and the capacity to think

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[2] Although these health problems are conferred by inheritance, research shows the chances of any one of them showing up in an individual are minute. They are all limiting only to the degree that differences are limiting.

are derived from the inheritance of genetic traits. In contrast, other traits are less stable and subject to modification by environmental variables. At this point, heredity and environment, nature and nurture are so intricately related that dichotomous arguments are meaningless.

Individual health reflects a highly integrated system of interactions between the internal and external environments of each person. Genetic inheritance, constituting the internal, are intimately related to demands coming from external environments. Social grouping, or culture, are thus environmental factors for each individual, though subject to change by the community. For most persons, their life is not determined by genetic or inherited potential, but the interaction of genetic potential with the environmental setting. If an individual possesses mathematical potential in a rural community where there is little use for the skill, his/her ability will not be highly valued. A person who has inherited a small, fragile stature and mathematical ability living in a highly technological society has a much greater chance for success than if that same person lived in a farming community where success is measured by ability to do rigorous physical labor.

Individuals can compensate for lack of natural ability by harder work, devote more time to developing their abilities, or alter the environment to better accomodate needs. People may possess talents not called for or appreciated in the environment. Knowledge and talent for growing vegetables is useless in a densely populated inner city with no soil space. In contrast, some individuals possess talents they choose not to develop. The ability to run long distances or swim numerous laps will not be fully developed or used if the person smokes, over eats, and remains sedentary. Even though we are all significantly influenced by our inheritance, it is only one kind of limit or advantage. The interactions between heredity and environment and what choices an individual makes are far more important in determining how well that individual will adapt.

There is no evidence that racial categories of black, white, brown, yellow, or red involve any significant differences in intelligence. Although likenesses are easier to name than variances, "every person is indeed biologically and genetically different from the other."[3] Prominent

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[3]Theodosius Dobzhansky, "Differences are not Deficits," Psychology Today (December 1973): 97.

scientists, psychologists, and educators have conducted research, gathered data, and have alleged a genetic basis for claims of racial inferiority.

Between Blacks and whites, the often cited Berkeley research by Arthur Jensen blamed a 10 to 20 point disparity in average intelligence quotient scores on inferior black genes. As a result, many teachers throughout the country now believe black children cannot be expected to do well in schools. Yet a few years later Arthur Jensen duplicated his Berkeley study in a rural Georgia town where the standard of living was low, but particularly low for Blacks. He found a significant and steady decline in I.Q. scores for black children from ages 5 to 16 years of age. White childrens' scores remained constant for the same age group. Jensen stated

> This means that the black-white difference at least in certain parts of the country does have an environmental cause such as living in depressed, disadvantaged conditions lower than whites in the same area . . . the latest results do mean that I.Q. discrepencies between whites and Blacks can't be attributed only to genetics.[4]

The earlier work of Jensen represents one of many accounts where genetic differences are evaluated separately

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[4]Arthur R. Jensen, "Jensen: Environment is a Factor in IQ," Science News 111 (June 18, 1977): 390.

from environmental factors and are singled out as "twice as important" as a cause of I.Q. differences among individuals.[5] The conclusion that genetics is more important than environment is very similar to the now passe single-agent theory used in medicine. Physicians now realize that contracting tuberculosis has as much to do with crowded living conditions, poor nutrition, general debilitation, and infrequent health check-ups as it does the tubercle bacillis.

Individual and racial or cultural diversity does exist because of slight variances in environment, experiences, and human adaptive choices. These differences provide a rich resource of collective human abilities, perspectives, and thinking potential. Dobzhansky has distinguished differences from deficits when he concluded

> Diversity is an observable fact; equality an ethical precept. Society may grant or withhold equality from its members; it could not make them genetically alike even if this were desirable.[6]

From the point of view of the teacher, the inherited differences within any racial group are overwhelmingly more important than any definable differences between racial groups. Some genetic factors reflect the interactions

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[5]Arthur R. Jensen, "The Differences are Real," Psychology Today (December 1973): 81.

[6]Theodosius Dobzhansky, et al., "Biological Aspects of Man," in Science, and Concept of Race, (New York: Columbia University Press, 1968), p. 79.

between inheritance and environment. For example, sickle cell anemia is concentrated among people living in tropical Africa and among whites and Blacks of Mediterranean origin.[7]

The sickle cell gene confers a resistance to malaria which was historically prevalant in these regions. The same gene causes an anemia that can be debilitatingly painful and can kill some people. But regionally, malaria killed profoundly more people--the sickle cell was therefore considered a valued trait. In regions, such as the United States, where malaria is not of major threat, the genetic value is of less significance than its anemia producing properties. Even though sickle cell anemia is associated with a racial group, not all black people possess the trait. In addition, sickle cell anemia can also be detected in significant numbers of white people.

Despite biological and physiological likenesses, every human being also desires to cultivate his/her individuality. Each strives to see herself/himself as distinctive from others. Because external environmental demands differ from region to region, groups of individuals have developed variations in human appearances, practices, and habits.

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[7]James Walker, "What The School Health Team Should Know About Sickle Cell Anemia," Journal of School Health 45 (March 1975): 72.

External demands within a region are converted into cultural practices and ". . . are transmitted from generation to generation and thereby give social identity to the group."[8]

When cultural practices that derive their importance from external influences are disrupted, the health of individuals within the group can be altered or endangered. The most dramatic examples are seen when cultural groups are forced or choose to change their environments. An environmental change usually stems from the inability to continue to meet the biological or social needs of the culture. Famines, drought, flooding or ensuing poverty are a few instances of environmental disruption. Mass migrations of rural Irish farmers, because of potato crop failures, to American cities during the early nineteenth century resulted in sickness and death for many of these immigrants.[9] The transition from rural to urban conditions, from fields to factories, crowded housing, and drastic changes in dietary habits prevented the continuance of a culture as had been practiced in

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[8]Rene Dubos, Beast or Angel?, p. 150.

[9]Robert B. Greifinger and Victor W. Sidel, "American Medicine," Environment Magazine 18 (May 1976): 10.

Ireland. New influences and demands had been introduced.

When a cultural group migrates to a new region, their health practices may not be understood or perceived as confusingly different to those already well entrenched within the region. These variations, because they are not understood or seem in conflict with practices that predominate, may be judged as inferior rather than simply different. Continuing the examples of stoicism contrasted with open expression of emotions, by emotional outbursts, the emotional expressions of people from Puerto Rico have been labelled as "hysterical" and "abnormal" by authorities who are less than compassionate toward cultural differences.[10] Cultural heritage and practices are an essential part of how an individual views his/her identity. For this reason, cultural diversity is intimately related to individual diversity and thus the two must be considered and appreciated as one.

Economic Influences

In settings where diverse groups of people live together, environmental conditions play a central role in health. Despite heredity or cultural practices, all

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[10]Nicholas Galli, "The Influence of Cultural Heritage on the Health Status of Puerto Ricans," Journal of School Health 45 (January 1975): 13.

social groupings will be exposed to circumstances that override individual differences. These influences are likely to "regroup" peoples according to how severely the influence impacts upon their lives. Income is one important environmentally related factor that greatly affects individual health. Whether there is money enough to buy nutritional foods, obtain adequate housing, buy access to preventive care or curatives for the ill, economic accessibility emerges as a fundamental variable.[11] Further, it has been shown that economic levels are related to certain health problems.

Health levels and their causes vary greatly among different groups in the United States. Mortality, debilitating or limiting health conditions, often socio-economically imposed, are many times more prevalent among the poor. When income rises, health is more influenced by behavioral choice. That is, the economically comfortable or affluent are beset with health problems of a different and more self-imposing nature.

Excessive consumption is a privilege as well as a danger for those who have economic access to goods and

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[11]Victor Fuchs, Who Shall Live?, p. 16.

services. When minorities rise economically, they also are found to adopt the hazardous, self-imposed health practices linked with abundance. Those who over-consume increase the possibility of limiting their participation in activities by developing health problems associated with obesity. Those who overwork can also limit themselves by illnesses where stress is a precipitating factor. Data lend credence to the notion that affluence and excesses, by choice, do adversely affect health. Where health choices are distinguished from socio-economic imposition, ". . . the least healthy members of our society are white males over 55, the population cohort most likely to over-consume, overwork, and underrest."[12]

In general, the health of minorities is the story of the impoverished. Black infant mortality, in this country, is almost double the white rate.[13] Other minority groups such as American Indians and those of Latin American origin have poor health levels. An exception, the Japanese, ". . . enjoy levels that are considerably above the national average."[14] Lower income, unequal educational and employment

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[12]Rick Carlson, The End of Medicine, (New York: John Wiley and Sons, 1975), p. 27.

[13]Arthur Levitan, Still a Dream, p. 129.

[14]Victor Fuchs, Who Shall Live?, p. 16.

opportunities all contribute to the socio-economic imposition of poorer health. Poor health, then, closes a desperate cycle that restricts potential activity and reduces the prospects for access to education and future employment.

The health of minority children, particularly Blacks, is more favorable than for whites. "Young non-whites actually have less frequent disabilities, and as a result miss fewer days of school . . . ."[15] But the gap quickly closes during adolescence when minorities far surpass whites in acute and chronic health problems. This trend continues throughout life. Many disabling health factors associated with the urban poor are consequences of racism, lack of doctors, hospitals that insist on payment before service, unequal access to education and a void of education and information about health. The urban poor may choose to live with chronic health problems until they are so severe that the barriers to care are less disabling than the disease. Typhoid or tuberculosis may be statistically higher among the crowded poor because preventive care and check-ups are least available in poverty stricken, urban areas.

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[15]Arthur Levitan, Still a Dream?, p. 135.

Most people have confused factors associated with urban environments with problems of poverty. Historically, poverty has clearly been associated with certain kinds of health issues. Poverty within an urban environment does lead to, encourages, or imposes a certain lifestyle that has health consequences. While gross statistics still show significantly lower health differentiation for high poverty, inner-city environments, there are clear counter examples that people can and do emerge healthy, well educated and successfully attain chosen goals. A more useful way to view sound health and educational competence is by the series of adaptations and choices individuals make. Teachers need to understand the critical importance of adaptive abilities and choices so they can prepare inner-city school children to become aware of and exercise the options and alternatives open to all.

Participants Learning Activities

This workshop combined the presentation of new concepts and information, through a discussion-question activity with an additional participant learning activity that centered around teachers initiating health lessons for classroom presentation. The more informal discussion-question activity was based on the content section of the workshop. Clarifications and elaborations were provided when requested. Many participants became actively involved

by questionning, offering their examples and understandings, or detailing cultural practices that were shared by students.

In addition, the structured activity was designed to encourage participants to direct their own learning experiences with guidelines suggested by the author. The ideas and materials generated in the previous workshop were suggested as a beginning point. The newly presented information and concepts could be used to further develop those ideas.

The following reports the activity chosen for inclusion in this workshop.

Activity--Developing a Health Lesson

Objectives

This activity was intended to:

1. Offer participants the opportunity to recognize the different cultures represented within the school;
2. Describe health related problems, concerns, or interests that seem to be culturally related;
3. Develop a health lesson that can be taught by team approach or individually; and
4. Teach that health lesson in the classroom at a later time.

Procedure

Following the discussion-question activity where concepts and information related to culture was presented,

participants were asked to (1) form small working groups and, identify all cultural groups represented by students within the school, determine a health interest the group would want to teach, list possible resources for information, decide upon teaching methods to be used; and (2) reassemble and share with the whole group their plans for implementing health teachings at Sacred Heart.

The small group participants' lesson plans are reported below.

Group 1.--The cultures identified were Spanish, Italian, Irish, Polish, English, Colombian, Equadorian, Black, and French. The health interest selected by this group was "proper bedtime." Participants decided that insurance company booklets, library filmstrips and books, nurses and health journals could provide resource information. The teaching method was a discussion-question technique by the teacher, followed by possible speakers or resource people.

Group 2.--Spanish, Black, and white comprise cultural identification. "Body cleanliness" (hygiene) was determined as the teaching topic. References would be the library, department of health, local hospitals, doctors and the school nurse, physical education teachers, and personal experiences. The learning goals were (1) that each child develop and appreciate a sense of pride in

his/her own personal appearance; and (2) that each child develops a daily routine for good grooming habits. In addition, the teachers shared this statement; "We see this as a unit plan in which students and teachers would work together to develop individual plans for daily hygiene--daily lessons would incorporate all subject areas and would include audiovisual materials, guest speakers, research work, and family involvement."

Group 3.--This group had a lengthy list of represented cultures. They included: Jamaician, Haitian, African, Cape Verden, Puerto Rican, Colombian, Panamanian, Mexican, Irish, French, Italian, Syrian, Polish, Greek, Indian, Caribe, and Central American. Participants felt all students would benefit from a lesson concerning "lack of sleep". Health books, science books, and the dictionary would help to create this lesson. The teaching method for the lower grades was dramatization. For the upper grades participants felt the following would be useful: one-week survey by students, dramatization, research and readings on sleep, and writing a commercial that encouraged more sleep. The goal was to improve the amount of sleep for health and better education.

Group 4.--Polish, Puerto Rican, Colombian, Irish, Italian, Lebanese, French, Panamanian, Equadorian, and Black (northern and southern) are different cultures

reported by this group. Their health concern was "respect for your body" including food, cleanliness, and sleep. This group used religion books, science books, and health magazines as sources for information. Their teaching approach started with the known and was followed with a talk about growth and the human body, care of life, and living things.

Group 5.--The final group to share named Blacks, Spanish, Irish, Polish, French, Italian, Greek, Colombian, and Russian as cultural groups found within the school. This group decided to build a unit around "better eating habits", "personal hygiene", and "better family relations". They chose to use posters, the T.V. media, filmstrips, pamphlets, and the school nurse as primary references. The instructional methods included chart keeping, teacher encouragement and teacher example, filmstrips, a possible field trip, and a visit by a dietitian.

The topics chosen by groups were problems of all elementary children and applicable to all cited cultures. It is clear that every group opted to avoid any health concerns that were culture specific. Some topics, materials, and approaches were innovative and will lend interest and experiental learning for children. Those groups that reported extensive culturally diverse lists probably provided other participants with greater insights into the

richly different backgrounds and perspectives found at Sacred Heart.

As each small group reported their plan, other participants seemed enthusiastic and interested in what their colleagues had chosen to teach and how it would be taught. Participants offered one another suggestions for additional methods and resources. The large group sharing portion of the activity concluded with participants planning among themselves how they could team teach the lessons, and revise the materials depending upon the grade level to which the topic would be presented.

Evaluation

Participants were requested to give their reactions to a questionnaire designed for this module at the completion of the workshop (See Appendix D). The questionnaire contained two sections. In the first section, eight statements were constructed to determine participants' attitudes and knowledge based upon workshop goals. A Likert scale of five categories: strongly agree, agree, unsure, disagree, strongly disagree was used. Content for each statement was taken from the workshop presentation. The purpose of the second section was to provide each participant with an opportunity to comment in an open-ended manner.

The data and results for the first section of the questionnaire are presented in two tables. Table 3 indicates

TABLE 3

SUMMARY OF CATEGORICAL RESPONSES FROM THE "A MULTICULTURAL PERSPECTIVE OF HEALTH" INSTRUMENT EVALUATION

Category	Mean	Standard Deviation
Participants' response to their own knowledge and attitudes about multicultural perspectives of health (Items 1, 2, 3, 4, and 5)	3.2	.58
Participants' response to providing children with multicultural knowledge and attitudes concerning health (Items 6, 7, and 8)	3.8	.44
Participants' overall response to a multicultural perspective of health (Items 1 through 8)	3.3	.57

the overall responses and assessment of the participants to their knowledge and attitudes about multicultural perspectives of health. Statements comprising the knowledge and attitude category were items 1, 2, 3, 4, and 5. The overall response is positive ($\underline{M}$ = 3.2). Items 6, 7, and 8 comprise the category concerned with participants providing children with multicultural knowledge and attitudes about health. Participants reported positively ($\underline{M}$ = 3.8) in this category. Finally, Table 3 indicates that the participants' overall response to the workshop was also positive ($\underline{M}$ = 3.3).

Table 4 presents participants' responses to each of the items on the evaluation instrument. Seven of the eight statements revealed a positive group response (items 2, 3, 4, 6, 7, and 8). Statement 1 indicates a slightly negative response. This statement asked participants if they felt culture played a part in a child's view of his/her own health. Perhaps the responses indicate a lack of knowledge or understanding regarding how students feel about their culture or their health.

The second section of the evaluation sought to elicit participants' reactions to the content, organization, and materials of the workshop. Questions were open-ended to provide an opportunity to express opinions freely. The following selected responses reflect the groups'

TABLE 4

SUMMARY OF PARTICIPANTS' RESPONSES TO ITEMS ON "A MULTICULTURAL PERSPECTIVE OF HEALTH: INSTRUMENT EVALUATION

Statement	Number	Mean	Standard Deviation
1. Culture rarely plays a part in how a child views his/her own health.			
Strongly Agree	1		
Agree	7		
Unsure	2	2.9	1.2
Disagree	8		
Strongly Disagree	2		
2. How we view the health of others whose culture is different is based upon our own view of health.			
Strongly Agree	0		
Agree	3		
Unsure	1	3.7	.80
Disagree	15		
Strongly Disagree	1		

TABLE 4 Continued

Statement	Number	Mean	Standard Deviation
3. All children living in the same environments share common health problems.			
Strongly Agree	1		
Agree	4		
Unsure	1	3.6	1.2
Disagree	10		
Strongly Disagree	4		
4. Income is a more important predictor of health levels than culture.			
Strongly Agree	0		
Agree	3		
Unsure	3	3.7	.87
Disagree	12		
Strongly Disagree	2		
5. Individuals whose income is high are assured good health.			
Strongly Agree	7		
Agree	12		
Unsure	0	4.2	.89
Disagree	0		
Strongly Disagree	1		

TABLE 4 Continued

Statement	Number	Mean	Standard Deviation
6. Teachers have the responsibility to provide health information that is relevant to the backgrounds and interests of all children they teach.			
Strongly Agree	5		
Agree	14		
Unsure	0	4.0	.80
Disagree	2		
Strongly Disagree	1		
7. Children should be encouraged to share the health practices and beliefs of their cultures as a part of any health lesson.			
Strongly Agree	5		
Agree	13		
Unsure	2	4.2	.58
Disagree	0		
Strongly Disagree	0		
8. Teachers should not attempt to provide information that contradicts the health habits children have learned at home.			
Strongly Agree	0		
Agree	17		
Unsure	3	3.9	.37
Disagree	0		
Strongly Disagree	0		

reactions to each question:

1. Did you find discussing multicultural issues related to health difficult?

"No, I wish we could have expanded multi-cultural issues. I am not adept on all cultures."

"No, I found it most interesting, and learned a great deal."

"Actually there was little discussion about it as a total group. In the small group we really talked of all children."

"No, it is ever present in our changing society."

"No, I feel that the many cultural experiences we have here at Sacred Heart are helpful for discussing health related issues."

"No, it was interesting and informative."

"No, health is an important and varied area for all cultures."

"No, because multicultural issues have been with me for years."

2. Did you find working in small groups helpful for discussing multicultural health issues?

"Yes, we were all in agreement with what was needed."

"Somewhat. We got 'stuck' by our own limitations."

"Yes, everyone is allowed ample time to share information."

"Yes, I am able to comment more fully."

"Yes, people open up much more in small groups."

"Not always, but sometimes more materials can be covered. I noticed a change from the last workshop in who was willing to speak."

"Yes, even though we spent a good deal of time talking about pinworms with you. Since it is such a problem (more so than many of us think) I found your contributions most helpful."

3. Do you feel you were adequately involved in the workshop?

"I listened attentively, and made several comments in group discussion."

"The opportunity was given to us. It was up to us to become involved if we felt able."

"Yes, the speaker had her information fully prepared."

"Yes, hearing ideas of others was helpful."

"Yes, I found these workshops both informative and helpful."

"Yes, there was a good balance between listening and working."

"Yes, especially sharing individual health problems."

"Yes, Carole, this was the most I'm ever involved."

4. List what you consider the strengths of the workshop to be.

"Lesson presentation had good ideas."

"Factual data."

"Bringing issues out into the open."

"The pure need of the subject during both workshops."

"Well prepared; appropriate to needs 'rapport wise' too."

"The excellent ideas and materials presented to us."

"Small groups because it helped to pinpoint local problems and suggested how to deal with them."

"Much work went into it."

"Working out interesting teaching methods and techniques."

"A building block to better knowledge of health."

"The strengths, to me, were the practical aspects--what do we intend to do with the lessons, materials, and how to start."

5. Were there weaknesses that you feel could be improved upon?

"Yes, somehow I felt some classes needed more practical involvement. The interest and the time factor were not always present."

"More specific in-depth information about multicultural influences on children's health. We, as teachers, needed more information to recognize the strengths/weaknesses of some of our groups."

"One and one-half hours would have been better for after school."

"More presentation of research you have investigated."

"More participation by each person present sharing of our own biases or myths connected with health."

"Many of the things said were repeated from the previous workshop."

participants who believe that issues of heredity and environment could be neatly separated. Participants listened intently and asked clarifying questions in an effort to sort out beliefs from the new and conflicting information. The results from participant learning activities indicated some hesitation over initial efforts to develop culturally relevant teaching lessons. The evaluations did show positive responses to the workshop and may strongly suggest an openness to growth and altered attitudes toward cultural diversity.

6. Do you feel you will initiate health teachings in your classroom in the near future? If so, what topics are of interest to you?

"General hygiene, rest."

"Risk-taking?, adequate sleep, and foods."

"Respect for a healthy body."

"Yes, but only on a personal, one to one level, when things come up."

"Cleanliness, sleep and nutrition--how to plan meals and choose foods."

"Respect for the body."

"Yes, I really would like to follow up with what has been presented. If we begin teaching the lesson developed today, I see this as only the beginning and could easily work it in with 'Our Becomming a Person' series. Also we do cultural studies in our Social Studies and it would be interesting for children to reflect on their own cultures and what health means to them."

Summary

This module was the most difficult to construct and to present. Research on the issues of race, heredity and environment, nature versus nurture are extremely confusing to sort out. Jensen's findings that heredity controls I.Q. or intellectual capacity is not a damaging statement. When intelligence levels are associated with degrees of melanin, the charges become damaging and racist. The implications are far more destructive because inner city teachers may blindly accept the conclusions and expect

less of minority students. The differences within any group are so varied that statements alleging any kind of inferiority are blatantly racist.

Environmentalists who claim poverty and decaying inner cities contribute to poorer health are statistically supported. Because minorities often times constitute the poor populations of inner cities, data also support the conclusion that minorities have poorer health. Yet countless inner city peoples are extremely healthy from birth to old age. Black children are healthier than white children. Minorities of middle income are as healthy or healthier than their white counterparts. Again, the differences within any group or area are greater than the similarities.

For urban elementary school teachers, it is essential to understand that generalizations about groups of peoples or areas is not helpful teaching information. Just as students with varying recorded I.Q. scores should be equally challenged and urged to succeed academically, so too should students with identifiable health concerns be given the opportunity to progress toward success. The challenge to teachers is to present understandings and information that is varied enough so each student can select from alternative goals that will fulfill individual needs and are attainable.

The workshop presentation might have confused some

CHAPTER V

COMMUNITY INTERRELATEDNESS AND HEALTH

Introduction

The third inservice workshop presented to teachers and staff at Sacred Heart Elementary School was entitled, "Community Interrelatedness and Health." Twenty-five of the teachers and staff attended. The purpose of the module was to utilize the concepts and information presented in the previous two modules by developing a total school health program that included diverse perspectives, and built-in health options for children which are consistent and meaningful for all. The focus of the workshop was to pull together separate health teaching interests by looking at possibilities for the design of an overall school health program. Small working groups and later discussion by the total group were methods intended to generate a variety of useful approaches for program development.

Workshop Content

This workshop was designed to meet an overall set of objectives that would provide teachers with a framework for an initial group attempt at generating a comprehensive school health program. The development of health curriculum across grade levels was thought to have greater impact were it to be a total group endeavor. Specifically, the overall

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objectives were (1) to present a framework for developing a school health program through lecture and discussion; (2) to transfer concepts presented in previous workshops onto the development of that health program; (3) to utilize the teacher identified health issues, problems, or concerns as a basis for shaping the program; and (4) to encourage participants to include parental and student input in the formation of such a program.

Learning goals for participants were

1. Participants will understand the importance of creating a school health program.
2. Participants will become more aware of the need to develop school policies based on a healthful perspective.
3. Participants will learn to distinguish between those health related situations that must be individually experienced, experienced by children and/or taught by teachers, and health related situations that should be guided by educationally designed community policies intended for all.
4. Participants will understand how the health of children can be the basis for greater family participation within the learning community.

Previous content and learning activities for participants focused on the identification of health concerns

and interests, the choosing of topics, and the construction of health lessons or unit plans for classroom teaching. This module was more concerned with looking at health curriculum for the entire school. Earlier learning activities indicated that some health topics cited were applicable to many grade levels and could serve as the basis for a comprehensive curriculum.

The content selected for incorporation into this module was intended to be useful for constructing a framework for a health program at Sacred Heart Elementary School. Three inter-related parts were chosen for building the framework. First, the planning for, choosing, and teaching of health curriculum provides the classroom experiences for developing the knowledge, understandings, and attitudes necessary for each student to become familiar with what is meant by health. Secondly, health services, including the work of the school doctor and nurse, evaluate the health status of students. Their professional expertise can lend information and advice to teachers, parents, and children. Thirdly, "healthful school living" is considered that part of the program that establishes procedures and activities which offer an environment conducive to optimal health and safety for the whole school.

Planning for the Health Curriculum

The success of a school-wide health program is

largely dependent upon the interest, commitment, and close communications between teachers and between teachers and administration. When teachers independently develop, present, and evaluate health lessons in their classrooms, major strides have been made. Stronger and, possibly, longer lasting accomplishments are possible when teachers meet to discuss their efforts, successes or failures, the needs of students, and together plan curriculum that is meaningful and appealing. The result of this kind of a group planning effort enables children to be more comprehensively exposed to health. By mutual support and exchange, teachers too can benefit through the sharing of acquired health knowledge, classroom activities that work, ideas for tailoring topics to grade level needs, and possibilities for developing health curricula that offer each student a cummulative understanding and knowledge from grade to grade.

The formation of a school committee composed of teachers representing all grades, the principal, and interested parents could serve as the planners for such an effort. A long range plan can be drawn up based on the goals for the school's health program. This plan can include the sequence and scope of health topics chosen and be flexible enough for modification and change as the program progresses. The principal's suggestions and support for rescheduling classroom time to include health, inviting community resource persons, identifying topics, coordinating assemblies and after school

activities centered around health, and encouraging the participation of the school nurse can be extremely useful for strengthening the program implementation. The committee can also periodically evaluate the curricula and propose improvements to keep in step with changing needs and trends.

The selection of topics that make up the curricula is most likely to be a mix of what students seem interested in and what teachers are interested in teaching. One way to begin the process of translating those interests into workable health lessons is for each planner to consider what he/she knows about the topic, what is felt about what is known, and what is done about what is known. If a nutrition lesson presents information and activities concerning vitamins, minerals, carbohydrates, fats, proteins, and the balanced meal, it would be a comprehensive learning experience. Yet for students who dislike to eat or who are overweight, this kind of a presentation may do little to generate interest or encourage changes in behaviors. A presentation devoting an equal amount of teaching time to asking students what kinds of foods are preferred, why, exploring how those preferences fit into balanced meal planning, and suggesting food choice alternatives would probably be more functional for learners.

Once topics are determined resource texts and other materials will aid in the development of the curriculum.

If students and teachers become interested in the curriculum, they will seek resources and materials that are informative. Standard health texts discuss the importance of student and faculty chosen curriculum rather than the complete reliance on texts. "What is taught in the classroom has tended to be dependent upon the textbook adopted by the school. Therefore, the scope of health education has been determined less by school administrators and teachers than by authors and publishers."[1] As committee planners gather resources and materials for curriculum choices, all teachers within the school will have richer opportunities for enhancing classroom learning experiences. Varied approaches for teaching health might also be discussed by the committee.

Teachers can use both formal and informal approaches for instructing children about health. Informally, teaching about health can be accomplished on a one-to-one basis in the classroom, corridors, and on the playground. Students experience situations related to their health under many conditions and circumstances. An expansive approach to teaching would be to utilize spontaneous or situational opportunities to share with children health understandings.

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[1]Delbert Oberteuffer, Orvis Harrelson, and Marion B. Pollock, School Health Education, 5th ed., (New York: Harper& Row, 1972), p. 96.

For example, a scraped knee resulting from an enthusiastic game of four-square offers teacher and student a situation where basic first aid can be taught through a learning by doing method. Children lined up at the hallway fountain might be interested in some anti-stomach ache advice from a teacher who explains how to drink from the fountain without gulping equal amounts of water and air.

Formal classroom health teachings can be organized in a variety of ways. Two overlapping approaches are commonly used together. First, health curriculum is arranged in sections and allotted a specified amount of time during the day. This arrangement is increasingly being adopted by middle and secondary schools. The arrangement is also appropriate for elementary schools that structure subjects into twenty to forty minute time blocks. The inclusion of health as a curricular topic would necessitate borrowing some time from other topic areas. If five subjects are taught each day and four to five minutes are borrowed from each subject, health curriculum could assume a twenty to twenty-five minute position with little lost from other areas.

The second basic organizational approach is to include health understandings in other subjects such as science, history, current events, reading and creative writing. A social studies unit on transportation could include a section related to health and the uses of

automobiles, buses, and highway systems. Ambulances help sick people get to hospitals quickly. Meals on wheels, blood mobiles, and blood pressure and vaccination motor clinics offer protective health measures to individuals who are home-bound or unable to travel to markets, clinics, or hospitals. Yet vehicles also endanger health through air pollution, mechanical failures, and accidents. One project for a transportation unit might be for each student to write his or her thoughts about the mandatory use of seat belts in automobiles. Since health, in the broadest sense, is the study of individuals and their interactions with the environment, all curricular areas involved, are related to, or influence health. Together the two approaches, specific time allotment and inclusion in other subjects, complement one another with each lending a different emphasis.

Planning for a total school health program is both time consuming and rewarding. Initially, many details need to be discussed and worked out. A number of meetings may be necessary to set the program into motion. Yet a group commitment and open communications can reduce actual effort and time spent by avoiding duplications in seeking resources, instructional aids, curriculum planning and development. The most important advantage is reaped by students because they will have access to understandings

and information that will be beneficial and applicable throughout their lives.

Health Services: A Resource for Teachers

Teachers and staff often feel that the health room is a distinctly separate part of the school. Teachers know it is the place where students go when they do not feel well; it is the center for immunizations and screening tests; and student health records are located there. Yet the doctor's periodic visit, the work of the nurse, their professional expertise, and the services they provide can offer teachers valuable information and resources for planning curriculum and teaching health. Although health professionals and teachers occupy space within the same building, and the potential for collaboration seems obvious, it has generally been an untapped partnership.

Lack of communication between teachers and nurses or doctors has been cited as the major stumbling block inhibiting the collaboration. The two groups are trained to meet the needs of children and to facilitate their growth and development. Even though the overall goals are similar, their prior professional training has equipped them with a different outlook toward children, and a specialized jargon that is sometimes incomprehensible to the other group. Professional isolation and communication difficulties often lead to misunderstandings.

> Teachers tend to be intimidated by nurses/doctors and yet have unreasonable expectations of them. Doctors often do not throughly understand the wide range of demands that are placed on teachers.[2]

To understand and appreciate the role each professional group plays, may encourage the long overdue communication and collaboration.

The relationship between a child's health and educational development has long been recognized. It is discussed in terms of nutritional deficiences, poor health resulting in poor attention span, and days missed from school. Although health services have traditionally been provided in schools, it was not until the mid-sixties that programs for comprehensive school health services were established. In 1965, Title V of the Social Security Act was amended to authorize organized school services.[3] The intent of these services focused on reducing the barriers to educational attainment caused by poverty and inaccessible health care, particularly preventive care. Yet the relationship between health and education extends beyond merely attending to existing health problems or

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[2]G. Robin Beck, M.D., et al., "The Physician-Educator Team: Let's Make It Work," Journal of School Health 47 (February 1978): 80-1.

[3]Vince L. Hutchins, M.D., "New Policies in School Health," Journal of School Health 47 (September 1977): 429.

intervening to minimize potential health problems. Nurses and doctors can offer teachers information and insights regarding child health. Likewise, teachers can provide nurses and doctors with knowledge of teaching methods and techniques.

Several times during the academic year, students leave their classrooms to pass through the health room. Hearing is tested with the pure tone audiometer, eyes are tested using the Snellen eye chart, vaccinations and immunizations are given with parental permission.[4] In some schools, complete physical examinations are also done. Before students leave the class enroute to the health room, teachers can utilize the situation to prepare students for what will happen to them. For example, teachers can design a lesson concentrating on the senses. Using a tape recorder prepared with a series of common sounds (a pencil falling to the floor, snoring, the rip of paper, the crunching sound of eating a carrot, and the sipping of a straw), students can be challenged to guess the sound. Thus, the value of hearing can be demonstrated.

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[4]Ohio State Department of Education, A Self-Apprasial Checklist for School Health Programs, (Columbus: Ohio Department of Education, 1976), pp. 11-13.

Students might also be better prepared to accept the momentary anxiety of an injection if they understood what disease they are being protected against. In addition, students can and should begin, as early as possible, to keep their own health records. A basic graph can be drawn up in class to list injections, dates, and when the next shot is due. Most individuals know if they step on a nail or get a deep wound, they should get a tetanus shot. Once a tetanus shot is received, not many individuals know how many years they will be protected.

A reciprocal arrangement with the school nurse is also of value. The nurse can help teachers develop health curriculum and act as a resource person for classroom teaching. Basic lessons in first aid (dressing a wound, splinting a broken leg, how to make a sling, how to read a thermometer) could be an active and exciting classroom experience presented by the nurse. Children can learn the newest techniques for tooth brushing and dental flossing from the nurse as teacher.

Teachers and nurses can also cooperate on a professional level through occasional conferences. Perhaps a student has epilepsy and the teacher either lacks information or is uneasy about how to respond should the student seize during class. The nurse can offer

information on the nature of the problem, explain the aura, how to protect the student during a seizure, and suggest possible approaches for diminishing the fear other children might have from witnessing the momentary occurance. Through communications between teachers and the nurse, an exchange of perspectives and information will help each to be better prepared to understand the needs of children and better meet those needs.

Healthful School Living

"Healthful school living" refers to the overall environment that exists within the building and grounds on a day-to-day basis. A series of inspections checking for sound plumbing, building ventilation, food service operations, fire safety and proper disposal of rubbish are usually controlled by the local department of health. School rules and regulations developed by administration and teachers are also an essential part of creating healthful environments. These rules and regulations are intended for adults and students to observe.

Regulatory policies are usually developed to protect collective health. Infringements are not easily tolerated because adults, at least, understand the reasons for rules and potential consequences to individuals and

the group if they are broken. Students are not allowed to run in halls because an unsuspecting person walking out of a room into the hall could be knocked down. If one student impatiently runs down a staircase filled with people, that student as well as others could fall down, in a domino fashion. Doors are not to be opened with force because another person could be on the other side.

In these and many other instances, individual needs or desires give way to group control. Society must demand conformity to safety laws, and, at times, health regulations.

> . . . we accept regulatory limitations because they provide a working framework within which the individual is freed from uncertainty and thus, within the restrictions, has greater freedom than he otherwise would have.[5]

Those who make inflexible rules, may fail to realize the unfair restrictions placed on those who must comply. A field trip to the local museum is an exciting bit of school adventure for children. They must line up early that morning to board the bus, sit quietly during the ride, and disembark in an orderly fashion. While in the museum, lines are the usual procedure and the trip

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[5]Dorothy Nyswander, "The Open Society," p. 6.

back to school is just as controlled. Teachers become upset and angry at the children who have missed their usual recess opportunity to run and scream and cannot understand how children could be so rude and unappreciative. Many teachers spend a great deal of teaching time demanding children to lower their voices. Noise levels may have more to do with poor building acoustics than misbehavior. If inflexible rules are made, caution should be taken to insure they are compatable with the organization and environmental conditions of the school.

Some rules are inflexible and designed for protection. Teachers can help all children to understand the necessity for these rules and the reasons for their inflexibility. Other rules and regulations are more flexible and can be modified or changed, depending on individual or group needs. Each teacher has certain classroom rules that may be different from other classrooms. For example, getting a drink of water during class or going to the restroom may be absolutely unacceptable to some teachers. Eating, except during lunch or recess, may be intolerable to one teacher and unimportant to another. If teachers are willing to share this kind of control with students, a lesson in democracy and health could be designed. Students and the teacher could propose rules and discuss

the reasons why. If the group agrees it becomes a rule. On the other hand, if some disagree, alternative proposals can be suggested to meet the needs of all students and account for exceptions too. Rules and regulations might better be observed if they belong to the group and are the result of a humane and democratic process.

Just as health rules and regulations will be better followed if they are group determined, health teachings will be more meaningful if the impact of the learning is shared by teachers and students. Teachers act as role models and their actions are as powerful for influencing students as their words. Values are conveyed to students through gestures, facial expressions, attitudes, body posture, voice tone, and physical appearance. Lessons in dental care or nutrition will be less significant, completely forgotten, or labeled hypocritical when the annual school fund-raising drive elects to have students sell quarter pound chocolate bars to families in the community. "Because much of what students learn about health is through observation, it is essential for teachers to serve as models for their students."[6]

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[6]Elbert D. Glover, "Modeling--A Powerful Change Agent," Journal of School Health 47 (March 1978): 175.

"Healthful school living" can be the conscious, well-thought out, organized result of mutual input of students and teachers. Students can help to prepare for health department inspections and learn what to look for and how to guard against potential problems. Students and teachers can form a before or after school committee to discuss and develop overall policies that are practical and sensible for everyone. Both adults and children should have the option to complain if rules are inconsistently imposed or are no longer relevant. Thus, rules and regulations become an educational experience with significance and group support.

Participant Learning Activities

The participant learning activity was designed to follow up on the content of the workshop. Content selected for presentation became an informal activity because teachers and staff willingly contributed to the presentation with their ideas, examples, and reactions to the material. Participants were encouraged to share their feelings as freely as they chose. Those feelings and ideas served as the basis for small group interactions. The following activity was chosen to support the concepts and information introduced during the workshop.

Activity--Developing a School Health Program

Objectives

This activity was intended to:

1. Introduce participants to the notion of what a school health program could be;
2. Describe the different aspects of such a program and possible options;
3. Offer participants the opportunity to identify health related components within their school;
4. Discuss how parents can have a meaningful role within a school health program; and,
5. Consider how students can participate in the setting.

Procedure

Following a presentation of information and examples of a school health program, participants were asked to: (1) identify the existence or absence of a health program within Sacred Heart and evaluate its strengths or weaknesses; (2) identify components within the school that could be the basis for developing a health program; and, (3) to consider how to begin to form a comprehensive health program.

Within the group as a whole, participants decided that Sacred Heart Elementary School did not have a health program. Most felt a health program could be a valuable

part of the school and offered their own descriptions of those advantages. Participants would like to seek the advice of the nurse or doctor in planning health lessons. Many determined they would begin their own health record keeping in addition to offering the same experience to children. One participant suggested that parents be invited into the school to learn the value of independent record notations. Some participants felt embarrassed because they did not know where the fire extinguishers were located. Another stated a health program was possible because it would not cost the school additional money.

The discussions revealed that participants would consider the lunch program, bathroom rules, playground, building, and bus rules, poster and bulletin board displays, the health room activities and nurse, physical exercise class, snack sales, and proper use of equipment as health related components of the school. It was generally agreed that the idea of a planning committee composed of students and teachers would be extremely useful. Although a few dissenting participants felt students could not handle the responsibility of being a part of such a group. In addition, ideas like an assembly devoted to health opics, a school play with a health theme, parent night to include health displays intended to inform, and

a group vote on the continuation of candy and donut sales were brought up. Finally, teachers felt that selected students participating on the health committee could have a voice in rule setting. At the same time, about half the teachers protectively reserved the right to institute classroom rules of their own choosing.

Evaluation

At the completion of the workshop, participants were requested to give reactions to a questionnaire designed for this module (see Appendix E). The questionnaire contained two sections. In the first section, nine statements were constructed to determine participants' attitudes and knowledge based on workshop goals. A Likert scale of five categories: strongly agree, agree, unsure, disagree, and strongly disagree was used. Content for each statement was taken from the workshop presentation. The purpose of the second section was to provide each participant with the opportunity to comment in an open-ended manner.

The data results for the first section of the questionnaire are presented in two tables. Table 5 indicated the overall responses and assessment of the participants to their own involvement in the development

TABLE 5

SUMMARY OF CATEGORICAL RESPONSES FROM THE COMMUNITY INTERRELATEDNESS AND HEALTH INSTRUMENT EVALUATION

Category	Mean	Standard Deviation
Participants' response to knowledge and attitudes about their own involvement in developing a healthful community. (Items 1, 2, 6, 7, 8, and 9)	3.6	.58
Participants' response to involving children and parents in the development of a healthful community. (Items 3, 4, and 5)	3.5	.51
Participants' overall response to community interrelatedness and health. (Items 1 through 9)	3.4	.49

of a healthful community. Statements comprising this category were items 1, 2, 6, 7, 8, and 9. The overall response was positive ($\underline{M}$ = 3.6). Items 3, 4, and 5 comprise the category concerned with participants' attitudes toward involving children and parents in the development of a healthful community. Participants responded positively to this category ($\underline{M}$ = 3.5) as well. Finally, Table 5 indicated that the participants overall response to the workshop was positive ($\underline{M}$ = 3.4).

Table 6 presents participants' responses to each of the items on the evaluation. All nine statements revealed a positive group response. Statements 4 ($\underline{M}$ = 4.1), 7 ($\underline{M}$ = 4.3), and 8 ($\underline{M}$ = 4.1) received the highest positive group response. These statements revealed participants felt most strongly about communicating with parents regarding school health teachings and practices, providing children with an awareness and understandings of why health policies and practices are developed, and the value of consistency in teaching health in all grades.

The second section of the evaluation sought to elicit participants' reactions to the content, organization, and materials of the workshop. Questions were open-ended to provide an opportunity to express opinions freely. The following selected responses reflect the groups' reactions to each question:

TABLE 6

SUMMARY OF PARTICIPANTS' RESPONSES TO ITEMS ON THE COMMUNITY INTERRELATEDNESS AND HEALTH INSTRUMENT EVALUATION

Statement	Number	Mean	Standard Deviation
1. Each child will perceive a health related situation within the school setting differently.			
Strongly Agree	2		
Agree	20		
Unsure	0	3.8	.74
Disagree	3		
Strongly Disagree	0		
2. For some children, going outside to recess in the winter without a coat on is less health endangering than for others.			
Strongly Agree	3		
Agree	14		
Unsure	1	3.5	1.0
Disagree	7		
Strongly Disagree	0		

TABLE 6 Continued

Statement	Number	Mean	Standard Deviation
3. Children should be included in the development of school health policy.			
Strongly Agree	2		
Agree	19		
Unsure	2	3.8	.82
Disagree	1		
Strongly Disagree	1		
4. Parents only need to be informed about the school's health program from their children.			
Strongly Agree	0		
Agree	0		
Unsure	3	4.1	.60
Disagree	16		
Strongly Disagree	6		
5. Teachers should not attempt to modify the health habits children have learned at home.			
Strongly Agree	0		
Agree	1		
Unsure	5	3.8	.65
Disagree	17		
Strongly Disagree	2		

TABLE 6 Continued

Statement	Number	Mean	Standard Deviation
6. Teachers within the learning community have a responsibility to provide information and to educate parents about health.			
Strongly Agree	5		
Agree	11		
Unsure	5	3.7	1.0
Disagree	3		
Strongly Disagree	1		
7. Each school should develop health policies that encourage children to become aware of the reason for certain health practices.			
Strongly Agree	8		
Agree	17		
Unsure	0	4.3	.47
Disagree	0		
Strongly Disagree	0		
8. From classroom to classroom and from grade to grade, health teachings should be consistent.			
Strongly Agree	6		
Agree	16		
Unsure	3	4.1	.60
Disagree	0		
Strongly Disagree	0		

TABLE 6 Continued

Statement	Number	Mean	Standard Deviation
9. Teachers should encourage children, at every grade level, to base their own health decisions on personal needs, experiences, and future goals.			
Strongly Agree	2		
Agree	17		
Unsure	3	3.8	.72
Disagree	2		
Strongly Disagree	0		

1. Did you find the materials shared today from the Hunting for Healthful Hints? booklet useful to you? If so, how?

"Yes, it reinforced the material presented in the workshop."

"Yes, I find that the materials will probably be very useful."

"Yes, I would think science teachers would be especially concerned."

"Yes, I became aware of varied responsibilities for health care."

"A good source of materials."

2. Did you find working in small groups helpful for discussing school health issues? Please comment.

"Yes, it is free, informal type talking. People tend to speak more openly."

"Yes, it makes for more lively and truthful communications."

"Yes, it's amazing how many areas of the school are related to health."

"Yes, everyone had a chance to say how they felt about school health."

"Yes, I felt good about the group setting today. They were everyday, concrete problems that I could relate to."

"I found some of the discussions common sense based and too lengthy."

"Yes, first of all because I feel very comfortable in a small group setting and, secondly, because they were problems we all can relate to and must deal with."

3. Do you feel you were adequately involved in the workshop? Please comment.

"Yes, I tried my best to enter into activities. Sorry about the time, it ended so late in the day."

"Yes, there were disagreements that needed to be solved."

"I was rather fatigued, but I enjoyed it."

"Yes, but would like more ideas on how we can all bring this information back to the classes."

"Yes, because of the real problems we have that must be shared between us teachers."

"Yes, on the issues I felt were important, I voiced my opinions."

"Yes, because opinions were evaluated by the group after they were compared with the philosophies."

"Yes, I had no desire to be more involved."

4. List what you consider the strengths of the workshop to be.

"Two-way involvement; common sense in dealing with health problems without strict guidelines."

"Healthy disagreement among the group."

"Working on all areas of health that are school related and home related."

"Topics dealt with; and knowledge of workshop leader."

"Spreading of ideas and stimulating thought."

"All members at Sacred Heart were involved in the workshop, working on health problems that are evident to everyone."

"The variety of opinions--what you would not necessarily think of, someone else did."

"I think it is an important topic, but could possibly be handled in a shorter time period."

"Need to share with the children social-personal responsibilities in a more active way, and assume more responsibility as teachers."

5. Were there weaknesses that you feel could be improved upon?

"Big weakness is after a full school day, no one had the potential to put into the workshop as we might have in a free day."

"More solid hints for implementing health education in the classroom."

"The time scheduling is not as good as it could be."

"Yes, it was long--like you were trying to cover a certain amount in a certain time."

"Some issues could be discussed more because they were left unresolved."

"I do not like the auditorium setting. It is difficult to hear. The circle was too large and made for a cold, formal setting."

6. Were the educational philosophies of value for resolving health concerns and issues? Please comment.

"We became more aware of how we approach children. We shouldn't make all decisions for children."

"Yes, it enabled us to compare and to think about our relationship to the children and to health."

"We were able to compare our feelings with the philosophies."

"Yes, you could distinctly see what category each subject fit into."

"I felt it was very subjective and depended upon the circumstance."

"I would like to see definite school programs set up and see how they fit onto the preventive philosophy of the workshop."

"Yes, I feel the philosophies were very easy to relate to and therefore good for discussions."

"Yes, for my own enrichment and, hopefully, my sharing with the children."

Summary

If the success of the workshop can be measured in terms of active participation, then this module was positively received. Discussions during the presentation phase were stimulating, contributions creative, and some statements pointed to inconsistencies and contradictions noted in the school. During the activity working group phase, interactions between teachers were sometimes lively with disagreement and conflict. One participant adamantly announced that children cannot handle the responsibility of setting or following rules. She proclaimed that students "lose their cool at the drop of a hat and cannot be trusted." The two fifth grade teachers who rotate all students between their two classes argued over whether students should be allowed to drink water while passing from class to class.

Most all participants agreed that closer collaboration between the school nurse and teachers made sense. Because the nurse is part-time many teachers had not met her. The principal was disappointed that she had not personally invited her to attend the workshops. One participant who, in an earlier workshop, asked questions about pin worms now realized she could consult the nurse concerning such matters. Another teacher has a student who had open heart surgery and is not sure how much activity the student can comfortably handle. Many participants seemed shocked that they had not utilized the health services before.

Reactions were strong and controversial over the idea of role modeling. Many protested they simply could not be all things and students should realize that. One participant was so personally insulted that he stated to the group he had been fat all his life, was comfortable, and considered himself healthy. Smokers basically agreed to the idea that it was hypocritical to smoke and, at the same time, teach non-smoking. The participants whose behaviors are more ideal felt role modeling was important and measures should be taken to improve teacher behaviors that affect students.

The workshop concluded with a few participant volunteers for the health program planning committee. Included was the principal. Teachers who agreed to serve

can be identified as those who are also most likely to teach health in the classroom. It is hoped that these teachers will act as role models for others who are more likely to forget as this health inservice workshop series becomes a remembrance of the past.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The design, implementation, and evaluation of an inservice teacher training program in health for urban elementary school teachers has been presented. The purposes of the program were:

1. To ascertain teachers' ideas and attitudes about health, and the health needs of the children they teach;
2. To introduce the notion that health must be individually determined, based upon the differing health options and goals in the future of the child;
3. To encourage teachers to create their own materials and methods for instruction; and,
4. To evaluate teachers' interest and receptiveness for instructing in health.

Additionally, the program sought to determine the feasibility of teacher-generated comprehensive school health curricula, given exposure to health content, methods, and materials.

Three separate inservice modules were presented to teachers and staff in an urban elementary school. All

modules were designed to present health as a humane process rather than merely to present information about health. Environment, adaptation, and risk-taking were curricular areas presented in the first module. The second module developed curriculum concerning genetics, heredity, environmental and economic influences related to individual health. The third module looked at the possibilities for the design of a total school health program. The content contained areas of classroom teaching, health services, and the practices and procedures that contribute to a healthful school environment.

Content selected for inclusion in the modules was intended to encourage teachers and staff to consider the community setting and the people who comprise it, and to address individual and differing health needs as teachers develop educational goals, plan for curriculum, and teach about health. Evaluation responses and results, from the first to the final workshop presentation, showed a steady improvement in teachers' attitudes, knowledge, and interest in teaching health to children.

Inservice education can offer a viable approach for presenting teachers with health concepts, methods, and materials that are both relevant and functional. A health program that encourages teachers to consider and to assess his/her individual health, independently, can prepare each to respond to their respective health needs

and responsibilities. In turn, teachers will be better able to prepare children to consider what health may individually mean and plan for health choices now and in the future.

Recent trends noted in the health of American peoples show that individual responsibility is key for confronting many common health problems. Manifestations of life style and individual choices currently determine the health status of the population. Medicine is limited to the treatment of individuals who exhibit illness. Those who are educated and informed about health possess the understandings necessary to assume responsibility for avoiding or minimizing health problems. Educational intervention may now be more timely than medical intervention.

Conclusions

Recently authorities in both disciplines, education and medicine, are concluding that efforts toward the preservation of health are far more sensible than only to care and to treat. Some health professionals are actively contributing to the health education of individuals. Newly published popular books like The Well Body Book, How to Be Your Own Doctor (Sometimes), and Talk Back to Your Doctor: How to Recognize High Quality Health Care are written by physicians. Medical schools such as Yale, the University of Rochester, and others now rotate third year medical

students in public elementary and secondary schools for exposure to and interaction with healthy children and youth. These medical students teach classes, offer advice, and answer student and teacher questions.[1]

Some colleges and universities are realizing the value of merging educational and medical perspectives. Physician-educator Keith W. Sehnert established a Continuing Health Education Center at Georgetown University where "lay people" can take self-care classes. Another physician-educator at Johns Hopkins University, Boris Zinberg, considers education positive and promising for enhancing the overall health of American peoples.

> The role of student differs sharply from that of patient in our society. 'Patient' is a deviant role implying sickness or weakness, while 'student' promises achievement. In fact, to maintain 'student' as a viable social role requires hope and activity, as contrasted to 'patient' with its accompanying feelings of passivity and helplessness.[2]

Classrooms can offer the education about health that adults are now seeking in books, self-care classes, and health programs. Most children and youth spend twelve years attending school. A considerable number devote many more years to the acquisition of knowledge and understanding

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[1]"Learning to Be Your Own M.D.," The New York Times Magazine, 2 April, 1978, Sec. 6, p. 43.

[2]Boris Zinberg, Teaching Social Change: A Group Approach,(Baltimore: Johns Hopkins, Press, 1976), P. 31.

that enable them to gain a sense of control over their lives by learning about the options and choices available. Because attitudes and behaviors are formed at an early age that can contribute to the health endangering activities of a youthful life style, it is even more crucial that educators prepare for and provide relevant health curriculum that encourages sensible and healthful choices.

Recommendations

That policy makers and educators are beginning to examine how schools might better educate all children in matters of individual health suggests that future students will have the opportunity to assume a greater sense of power and control over their lives and health. Scientific and popular journals have described health as an active process. Programs designed to involve individuals in the active care and maintenance of their health are beginning to emerge. Children and adults now see that health issues are pertinent, and exciting and not simply the study of hygiene.

Too few programs are being conducted that encourage elementary teachers to prepare for the natural curiosity and enthusiasm children have concerning health. The need for additional inservice teacher training programs is great. From experience and insights gained during the

development of materials, workshop presentations, and evaluation of results, the following recommendations can be made.

1. This inservice teacher training model should be presented again under circumstances that would allow for an extended number of inservice days and greater teacher exposure to health curriculum.
2. A series of videotapes showing a classroom setting where teacher and children are involved with health curriculum and activities would be a valuable inservice presentation tool.
3. Involving children from the school in a demonstration led by the facilitator, with health learning activities would be useful for showing participants the interest and enthusiasm children have for health curriculum.
4. The content materials used should be extended to include more health topics and a greater variety of activities for both teachers and children as learners.

Observations made during the research of this dissertation and experience gained as a graduate assistant

in a pre-service teacher education program have led to the realization that group endeavors are more far reaching, effective, and longer lasting than most single efforts. The following are a few recommendations that involve group support for creating a more healthful school environment.

1. A community school-based health inservice program should be developed in collaboration with institutions of higher education. It is suggested that elementary teachers receive college or university credit for health and education related coursework. In addition, university or college faculty will gain benefits from working with children and teachers in a local community school setting.
2. Schools of education need to offer courses in health at the graduate and undergraduate levels. It is particularly important that preservice elementary teacher education programs offer health concepts, methods, and materials as an essential curriculum offering.
3. Efforts should be undertaken to foster greater collaborations between teachers and school nurses. This might be begun at institutions of higher education where student nurses are encouraged to take education courses related

to health and student teachers are provided exposure to health content. In community schools, an emphasis should be placed on a professional partnership that taps the unique skills and understandings about children each partner can offer.

4. Further Federal support is needed through the submission of a bill similar to the Comprehensive School Health Education Act of 1975 that would fund projects for preservice and in-service teacher training programs in health, pilot and demonstration projects, and the development of contemporary health education curriculum.

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A P P E N D I X A

Pre-Questionnaire

1. What health courses did you take in college? Please list. (If it applies, underline those courses that were part of your teacher preparation program.)

2. Have you attended any health related programs, courses, or workshops within the community? Please list.

3. What grade are you currently teaching?

4. What grades have you taught in the past?

5. How long have you been working with children in schools?

6. What particular areas within health do you feel should be taught to elementary school children?

7. Have the children you teach voiced concern or interest in learning about health? If so, please describe their interest(s).

8. On a scale of 0-5 (0 being not at all interested and 5 being very interested), how would you rate the following:

   a. Your general knowledge of health_____

   b. The health knowledge of the children you teach_____

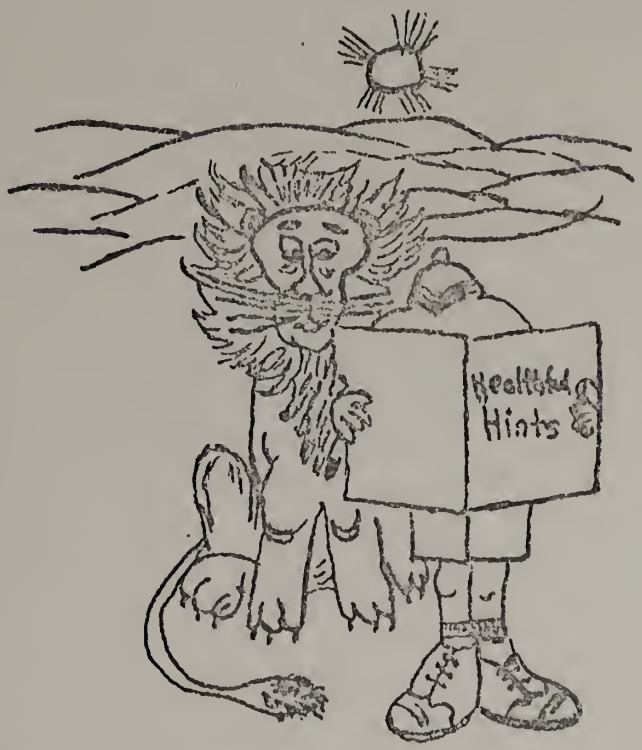
   c. Your personal interest in health_____

   d. Your willingness to teach health _____

APPENDIX B

HUNTING FOR HEALTHFUL HINTS ?

. . . HEALTH EXPLAINED TO CHILDREN



Prepared for: The Teachers and Staff of
Sacred Heart Elementary School
Inservice Education
October and November, 1977

Prepared by: Carole Anderson

Table of Contents

Preface

Sources contained in the "Hunting For Healthful Hints" booklet were randomly selected from educational reference guides. They are geared toward the elementary level student and teacher. The purpose of compiling these sources is to demonstrate the availability and variety of health related educational materials appropriate for classroom use. Upon written request, these resources are usually provided in student quantities for a nominal fee or free to school staff. More costly texts and curriculum guides have been included for those interested in a comprehensive look at health teachings for each grade level.

On the following pages are listings of health guides, pamphlets and posters. Included is an abstract of the material, order number, mailing address and cost in parentheses. The materials have been listed as free if no cost appears in the abstract.

These forty abstracts reflect a sample of the body of free or inexpensive materials for the teacher's use in supplementing the development of modules, units or lessons in health. Reference catalogues also listed in this booklet provide vast numbers of additional pamphlets and posters also attainable in specific knowledge areas. These materials can be used for incorporation into other curricular areas. For example, nutrition labeling information on products may provide a new twist in conveying basic math concepts. Also, you may want to include the personal and environmental health aspects related to a transportation unit in social studies.

Many articles in popular magazines or current newspaper clips deal with health issues. Some provide specific information while others may

discuss more general health concepts or recent problems faced by individuals and/or communities. The articles or newspaper columns are usually very readable and thought provoking. With some degree of ease, these sources could be transformed into classroom teaching units. Or perhaps assigning students the task of seeking out current magazine information related to the unit you're teaching would provide a worthwhile action activity and sharing experience for all involved. Examples of popular magazines usually including teachable topics are: Family Health, Today's Health, Ebony, Newsweek, Parents and Time. For teachers, the Journal of School Health, School Health Review, Journal of Family Health and Instructor provide rich resources for initiating or supplementing health teaching.

Finally, the reference resources used in compiling this guide are found on the last page of this booklet. Additional guides can also be located. The Springfield Public Library or local college libraries house these source books in their reference section for your review.

Mailing for Materials

In making requests for the free or inexpensive materials listed on the proceeding pages, it is advised that the following directions be followed:

1. The request should be written on official stationary whenever possible.

2. Addresses should include zip codes.

3. Persons requesting materials should make clear that they are a teacher or other member of the school or library staff, or director of an instructional materials center. Sponsors are interested in making materials available for teachers and librarians, but they are understandably reluctant to provide materials if they believe they are ordered simply as an exercise for students.

4. The agencies can give better service if the grade level and subject for which the materials will be used are indicated.

5. The abstract is not part of the title and is not to be included in the request.

6. If any item has an identifying number, be sure to include it.

7. Specific items should be requested. Titles of materials are to be quoted exactly as listed. Open requests for "anything available" are not to be used.

Abstracts of Free or Inexpensive Materials

Vitamin Chart

This chart lists function of, deficiency results, sources, and history of 11 vitamins; 3 pages, 8 1/2 X 11 inches. Single copies to teachers. Merek Sharp & Dome, Public Relations Department, West Point, Pennsylvania 19486.

First Aid For The Family

Wall card outlining treatment for numerous emergencies. One copy to teachers. Metropolitan Life Insurance Company, Health and Welfare Division, One Madison Ave., NY, NY 10010.

Exploring Health

A workbook-text on how the body works and how to develop correct health habits and practices. The illustrations are of children, but the ma-erial is on an adult level. Book. Steck Vaughn Co., P.O. Box 2028 Austin, Texas 78767 (90¢).

Stock Up For First Aid

How to equip your first aid kit. Pamphlet. American Medical Association, 535 N. Dearborn St., Chicago, Ill. 60610 (20¢).

Fast Facts About Sickle Cell Anemia

Sickle cell anemia: what it is, who is likely to have it, its symptoms, and what is being done about it. National Foundation March of Dimes, P.O. Box 2000, White Plains, NY 10602 (Free).

Where's Herbie

A story and coloring book about sickle cell anemia. Pamphlet no. 1791-0177. National Sickle Cell Disease Program, National Inst. of Health, Bethesda, MD. 20011 (30¢).

Children's Fire Safety Lessons Coloring Book

"Matches are for lots of things that older people do, So I tell little sister, they are not for me or you. When we grow up we'll use them, too, in a safe and careful way, But now we never handle them or use them in our play." This is just one of the 8 rhymes in this book to teach children fire safety. Along with each rhyme, there is a picture for them to color. Five copies available; 7¢ each additional. Kemper Insurance Company, Communications and Public Affairs Dept., D-1, Long Grove, Ill. 60049.

Children's Safety Lessons Coloring Book

"At the curb before I cross, I stop my running feet, and look both ways to left and right before I cross the street, Lest autos running quietly might come as a surprise, I don't just listen with my ears

but look with my eyes." This is just one of the ten safety lessons included in this coloring book. Each lesson also has a picture for children to color. Five copies available; 8¢ each additional.

Nutrition Alert

Stresses the importance of using the "basic four" as a guide for food selection and menu planning. Classroom quantities (maximum 35 copies) to members of the professional staff. National Canners Association, Consumer Education Counsel, 1133 Twentieth Street, N.W. Washington D.C. 20036.

How Do You Score on Nutrition?
Vitamins and Your Health
Vitamins in Your Growing Years

These three pamphlets give background information and specific data about vitamins. A limit of two copies of each title available. Vitamin Information Bureau, Inc., 664 North Michigan Avenue, Chicago, Illinois 60611.

Only One Pair To A Customer

This guide to eye and hearing safety presents facts about eyes that will help you preserve good vision; 25 pages. Limit one copy per request. General Scientific Equipment Company, Limekilin Pike & Williams Avenue, Box 27309, Philadelphia, Pennsylvania 19150.

Schematic Section of the Human Eye

This chart explains vision and anatomy of the eye; 8 1/2 X 11 inches. One copy. American Optomertric Association, Inc. Public Information Division, 7000 Chippena Street, St. Louis, Missouri 63119.

Human Heart, The: A Living Pump

This chart shows a cross-section of the heart as well as the circulatory system of the human body. Reverse side also gives glossary of basic terms. A limit of 50 copies. National Institute of Health; National Hea-t, Lung, and Blood Institute, Public Inquiries and Reports Branch, Bethesda, Maryland 20014.

Mighty Potato, The--Storehouse of Good Nutrition

This 17 X 27 inch wall chart stresses the nutritional value of the potato. Single copies to schools. French Company, The R.T., One Mustard Street, Rochester, New York 14609.

Series of Seven Charts on Vegetables and Nutrition

Colorful charts, 14 X 22 inches each. Single copies are available. Titles are: Versatile Vegetables--Around the World, Versatile

Vegetables--Fun Foods 'Round the Clock, Versatile Vegetables--Meatless Main Dishes, Versatile Vegetables--Paint a Pretty Picture, Versatile Vegetables--Play Their Part in Good Menu, Versatile Vegetables--See How They Grow, Versatile Vegetables--The ABC's of Beauty. Green Giant Company, Home Services Department, Hazeltine Gates Office, Park Chaska, Minnesota 55318.

Science, Health, Safety Curriculum Guide: Unit Revision for Family Living Curriculum, K-6

The curriculum guide is a revised unit in family living and sex education for K-6, planned as a continuing school experience for the child and meant to be correlated, integrated, and articulated with the total educational program. It involves concepts of human sexuality and provides activities to motivate student learning. Publ. Date: 71 Note: 57 p. Rochester City School District, N.Y. ($3.32).

Outdoor Education Activities for the School Curriculum

The basic resource materials in this document represent the cooperative efforts of graduate students enrolled in a 2-week field learning class at the State University of New York (Plattsburgh). These reports are an initial attempt to acquaint teachers with the many activities available to enrich the curriculum through the Outdoor Education Methods. Publ. Date: 72 Note: 110 p. State Univ. of New York, Plattsburgh Coll. at Plattsburgh. ($5.70).

Health Concepts, Guides for Health Instruction

Concepts and supporting data pertaining to major health problems facing youth today as well as those anticipated in the next decade are enumerated in this resource. The material is designed as a reference for curriculum planners and classroom teachers in developing curriculum and teaching guides, units and instruction, and other curriculum materials for elementary schools.
Publ. Date: 67 Note: 57 p. American Association for Health, Physical Education, and Recreation, 1201 16th Street, N.W., Washington, D.C. 20036. (244-07774) ($1.75).

Health Education Publications

ABC's of Perfect Posture (OP-330); a booklet for classroom use. One complimentary copy to teachers in the United States. American Medical Association, Department of Health Education, 355 North Dearborn Street, Chicago, Illinois 60610.

Accent on You

A booklet for teenage and adolescent girls. Classroom quantities available. Dispelling the Menstrual Myth-outlines a teaching unit on menstrual health with sample questions and answers. Single copy to teachers.

Canadian Tampax Corporation Ltd. Department EL-C, P.O. Box 3500, Barrie, Ontario, Canada L4M 4V3.

Lunch To Go

Luncheon ideas for every member of the family who carries a "brown bag". Classroom quantities available. Dow Chemical Company, Box 68511, Indianapolis, Indiana 46268.

Health Education in the Elementary School. Fourth Edition. Willgoose, Carl E.

This book on health education in the elementary school is designed for the teacher who is in a unique position to make a significant contribution to the health of school children. The major part of the book is specifically concerned with health instruction and the movement away from health teaching as a "do-gooder" activity to a carefully organized and programmed part of the total school curriculum. The concern is for inner-city children as well as those from rural and suburban areas. Publ. Date: Jan 74 Note: 416 p. W.B. Saunders Company, West Washington Square, Philadelphia, Pennsylvania 19105 ($10.75).

Education for Survival. First Aid and Survival Education. Grades 4,5, 6.

First aid and survival education. The guide is divided into seven sections: introduction to first aid; wounds and control of minor bleeding; respiratory emergencies and resuscitation; poisoning; traumatic shock; and injuries from abnormal conditions. Each section contains questions and topics for discussion.
Publ. Date: 70 Note: 54 p. New York State Education Dept., Albany. Bureau of Elementary Curriculum Development. ($3.32).

Physical Health: Health Status. Health Curriculum Materials for Grades 4-6.

This health curriculum guide, intended for use with children in grades four through six, contends that the school is in a unique position to supplement efforts by home and community in raising the levels of physical, mental, and social-emotional health for each child. The contents of the guide are presented in outline form and cover observing signs of positive health, planning for total fitness in each individual's life, and other environmental and community factors which may influence health.
Publ. Date: 70 Note: 28 p. New York State Education Dept., Albany. Bureau of Elementary Curriculum Development. ($1.95).

Physical Health; Health Status for Grades K-3.

This health curriculum guide, intended for use with children in kindergarten through grade three, is based upon the discovery of the multidimensionality of the concept of health and fitness, with

its physical, emotional, and social components. The contents of the guide are presented in outline form and cover health measurement, getting to know the school health team, others in the community interested in health, and keeping well and happy.
Publ. Date: 70 Note: 35 p. New York State Education Dept., Albany. Bureau of Elementary Curriculum Development. ($1.95).

Elementary School Health Education Curriculum Guide

Continuity in the development of a comprehensive health education program for kindergarten through sixth grade is the goal of this curriculum guide for teachers. It is designed to encourage discussion and build concepts rather than to give specific information.
Publ. Date: 71 Note: 209 p. Texas Education Agency, Austin, Texas. ($10.78).
Kemper Insurance Company, Communications and Public Affairs Dept., D-1, Long Grove, Illinois 60049.

Teachers Guide for Bicycle Safety Education

Contained here is a compilation of suggested classroom and outdoor activities for teaching bicycle safety education. Projects are provided for use in each of the three grade levels: K-3, 4-6, and 7 through 9. These are taken from material prepared by educators for use in regular AAA "Traffic Safety Lesson Guides for Teachers." Available only on request through your local AAA Automobile Club. Single copies to teachers. American Automobile Association.

Creating Climates for Growth

This booklet has a two-fold purpose: (1) to help teachers to understand the emotional life of their charges and use this perception to enhance the teaching-learning process, and (2) to help teachers recognize and deal more effectively with their own feelings and reactions and to utilize this empathy to become increasingly sensitive and responsive. Single copies. Hogg Foundation for Mental Health, Publications Division, P.O. Box 7998, University of Texas, Austin, Texas 78712.

So, I Have The Sickle Cell Trait...

This cleverly illustrated booklet explains the possibility of a sickle cell trait carrier having children with sickle cell anemia. Available in English and Spanish. Limit 50 copies. National Heart and Lung Institute, Public Inquires and Reports Branch, National Institutes of Health, Bethesda, MD. 20014.

Teacher's Guide To Vision Problems

Among teachers and parents there is a growing recognition of the importance of vision as a factor in the progress and well-being of the child. This leaflet for the teacher's use as a symptom check in recognizing vision difficulties in the classroom. Single copies.

American Optometric Association, Public Information Division, 7000 Chippewa Street, St. Louis, Missouri 63119.

There Was A Child Who...

If the title read "There was a child who has special needs," teachers would know that it referred to every child they had ever taught. But what does the teacher do when the title really is "There was a child who was immobilized by fear," or "There was a child who could not learn to read or to do problems in mathematics"? This leaflet will help the teacher gain an insight into the problems of these children and, with this newly-gained insight, will change the title of this book to "There was a child who was blessed by having a teacher who knew 'what was in there' and helped him/her to grow into a meaningful human being." Single copies. Hogg Foundation for Mental Health, Publications Division, P.O. Box 7998, University of Texas, Austin, Texas 78712.

Understanding Braille

For hundreds of years there was no adequate system of reading and writing to educate the blind and many thought they were uneducable. This, of course, is not the case, but it took a blind, French youth to prove otherwise. Today blind people throughout the world can read and write due to the accomplishments of Louis Braille, who, as a blind and concerned student in 1824, devised the system that became known by his name. This brochure explains braille writing and includes a sample of the entire braille characters. Limit of 50 copies. American Foundation for the Blind, Public Education Director, 15 West 16th St., New York, NY 10011.

First Aid For Little People

This booklet is designed for children in K through 3rd grade. In it, many first aid techniques are presented in the simplest way possible. It touches briefly on bleeding, artificial respiration, poisoning, burns, animal bites, cuts and scratches, nose-bleeds, fainting, foreign objects in the eye, and bruises. Available in classroom quantities. Johnson & Johnson, Anne Williams-Consumer Services, 501 George St., New Brunswick, New Jersey 08903.

Food Labels: The Guide To Better Nutrition

If you're like most shoppers, you look for a label that shows both the kind of food and the brand you want. That's fine, but not enough. You should also look at the label for information about the product's nutritional value. This guide is published to help shoppers in label reading so that the best value and nutrition is brought to their attention. Limit 25 copies. Hoffmann-La Roche Inc., La Roche Chemical Division, Attn: Editor, Nutley, New Jersey 07110.

Food Shopper Language (078D)

Everyone wants to know just what it is that they are buying. However, some of the language used is not on everyone's level. Here is a 9-page guide to product terms used in the grocery store and food ads for laypeople. Public Documents Distribution Center, Pueblo, Colorado 81009.

How Can I Tell If It's Fresh

Naturally, we all are interested in buying only food that is fresh. But, how do you know if it is fresh? This leaflet presents information on food dating to help you make sure you buy only fresh food. It also contains information on the proper storage and handling of such food to insure that it stays fresh; 4 pages. Single copies available. Oscar Mayer & Co., Consumer Relations Department, P.O. Box EG 1409, Madison, Wisconsin 53701.

It's Your Problem--Air Polution (0690)

The battle for clean air is gaining recruits every day. Over 140 million tons of pollutants are being poured into the air each year, and people are now recognizing that air pollution is their problem. There are ways each individual can help fight pollution even though it seems to be too overwhelming of a task. Here are six solutions to the problem. American Lung Association, 1740 Broadway, New York, NY 10019.

Ecology For Urban Children

This is a good aid in planning how, what, and where to teach ecology to urban youngsters. National Agricultural Chemicals Association, Educational Materials, 1155 Fifteenth Street, N.W., Washington D.C. 20005.

Posture Activity Book B-2

This is a combination coloring-activity book. It includes puzzle pages, secret code pages, and pages to draw on. Each of the activities relates to good posture. One copy free; additional copies 25¢. American Chiropractic Association, Sales and Services Department, 2200 Grand Avenue, Des Moines, Iowa 50312.

Posture Growth Chart B-11

This chart presents the normal height and weight for [illegible]s and girls from ages 3 through 16 and contains space for recordi[illegible] the height of the students in the classroom. Limit of 10 copies free; additional copies 15¢ each. American Chiropractic Association, Sales and Services Department, 2200 Grand Avenue, Des Moines, Iowa 50312.

It's Fun To Be Healthy

"To boys and girls in school, can you guess the answer to this riddle? When you have it, You don't notice it, But when you lose it, You miss it very much." The answer is good health. This booklet is written directly to younger children. It tells how to maintain good health, by eating properly, exercising, and practicing good health habits. Classroom quantities are available. Prudential Insurance Company of America, Public Relations and Advertising Division, P.O. Box 36, Newark, NJ 07101.

Toothbrushing Charts

Included are a wall chart for classroom display and small charts for distribution to children. Wall chart, 17 X 24 inches, illustrates toothbrushing method which has been suggested by many dentists and provides an honor roll listing of children who have brushed their teeth regularly. Small chart, 6 X 9 inches, repeats illustrations given on the classroom chart and provides space in which to keep a month-long record of toothbrushing at home. For grades K through five. Lever Brothers Company, Consumer Education Department, 390 Park Ave., New York, NY 10022.

Air Pollution Primer

Knowing that clean air can be restored only with the spur of community pressure, by citizens furnished with information and determination, this source has attempted to provide, in this book, at least some of the necessary knowledge and motivation. In laypeople's terms, it covers the sources, effects, processes, and meteorological aspects of air pollution. It includes a glossary and an index; 104 pages, illustrated. American Lung Association, 1740 Broadway, New York, NY 10019.

Ekosi-Sphere

Let the world know you're a conservationist. Display an ekosisphere. This colorful 20-sided sphere containing ten simple conservation messages can be displayed on the wall. Limit of 3 copies. Manitoba Department of Renewable Resources & Transportation Services, Box 22, 1495 St. James Street, Winnipeg, Manitoba, Canada R3H 0W9.

Evaluation of Materials

Teachers and health specialists have the problem of selecting from the many pamphlets and posters available that are appropriate and effective for enhancing the learning process. Some materials use fear, threaten loss of function/ability to argue in favor of people behaving in a certain "acceptable" way. Other literature and visual aids are designed in such a way as to present only one side of the picture. A "Drugs Kill" poster or pamphlet may offer a confusing, mixed, or even hypocritical message to the student whose functioning is dependent upon their everyday insulin pill or injection. To a lesser degree, some families strongly encourage their children to take daily vitamins for nutritional enhancement or to swallow an aspirin for a headache or fever. These are considered drugs but do not harm or kill. Because of the quantity and variety of free or inexpensive teaching aids available, it is important to develop a critical eye for the poster, pamphlet, or film series that are void of negative value judgements.

The materials selected for your review in this booklet have been taken from educational reference books. In most cases they have been chosen for use in schools on the basis of: (1) educational appropriateness--in terms of today's curricular needs; (2) timeliness--gives recent information not readily available elsewhere; (3) format--conveniently arranged and easy to use; and (4) content--free from undesirable commercialism, high in teacher-student interest.* In addition to the review and evaluation process these and other materials are subjected to, when

*Horkheimer, Foley A., ed., Educators Guide to Free Health, Physical Education and Recreation Materials. (9th ed.) Randolph, Wisconsin: Educators Progress Service, Inc., 1976.

received by the school, the teacher should determine their potential for helping children achieve the understandings, attitudes, information, and skills necessary to promote and maintain health.

To aid you in this appraisal, the following rating scale is included. The "Rating Scale to Evaluate Health Education Materials" was developed by the School Health Activities Committee of the Tuberculosis and Health Association of Los Angeles County, California. This Scale was designed to help schools better meet health teaching needs, improve the quality of health instruction, health services, and healthful school living. The committee would judge materials to be appropriate when they meet these objectives: (1) they are scientifically accurate and free from bias; (2) they contribute to the development of critical thinking and use logical rather than emotional or propaganda techniques; (3) they are directed toward positive health practices; (4) they stimulate interest in the topic or lesson and provoke desirable pupil activity; (5) they reinforce materials; and (6) the time involved in their use is justified.**

**Osborn, Barbara M. and Wilfred Sutton, "Evaluation of Health Education Materials, Journal of School Health 34 (February 1964): 72-73.

Rating Scale to Evaluate Health Education Materials

A. SUITABLE MATERIAL MEETS ALL OF THESE CRITERIA	YES	NO
1. Is appropriate to the course of study.....	____	____
2. Is a reinforcement of other materials.....	____	____
3. Is significantly different.....	____	____
4. Is impartial, factual, and accurate.....	____	____
5. Is up-to-date.....	____	____
6. Is non-sectarian, non-partisan, and unbiased..	____	____
7. Is free from undesirable propaganda.....	____	____
8. Is free from excessive or objectionable advertising.....	____	____
9. Is free or inexpensive and readily available..	____	____

B. PAMPHLETS	EXCELLENT	GOOD	FAIR	POOR
1. Readability of type.....	____	____	____	____
2. Appropriateness of illustrations	____	____	____	____
3. Organization of content.....	____	____	____	____
4. Logical sequence of concepts....	____	____	____	____
5. Important aspects of topic stand out.....	____	____	____	____
6. Material directed to one specific group such as teachers, pupils or parents.....	____	____	____	____
7. Reading level appropriate for intended group.....	____	____	____	____
8. Based on interests and needs of intended group.....	____	____	____	____
9. Positively directed in words, descriptions and actions.....	____	____	____	____

	EXCEL-LENT	GOOD	FAIR	POOR
10. Directed toward desirable health practices.....	____	____	____	____
11. Minimal resort to fear techniques and morbid concepts.....	____	____	____	____
12. In good taste; avoids vulgarity, stereotypes and ridicule.....	____	____	____	____
Total Rating.....	____	____	____	____

C. POSTERS

1. Realistic and within experience level.....	____	____	____	____
2. Appeals to interest.....	____	____	____	____
3. Emphasizes positive behavior and attitudes.....	____	____	____	____
4. Message clear at a glance.....	____	____	____	____
5. Little or no conflicting detail.	____	____	____	____
6. In good taste.....	____	____	____	____
7. Attractive and in pleasing colors.....	____	____	____	____
Total Rating.....	____	____	____	____

D. RECOMMENDED FOR USE

1. For use by:

   a. pupils____ b. teachers____ c. parents____ d. adults____

2. Appropriate grade level:

   a. primary____ b. elementary____ c. junior high school____
   d. secondary____ e. college____ f. adult____

E. NOT RECOMMENDED FOR USE AND WHY

Date_____ Evaluated by_____

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Selected Reference Guide Books

DuVall, Charles R., etal., ed., Educators Index of Free Materials. 85th ed., Randolph, Wisconsin: Educators Progress Service, Inc., 1977.

Gotsick, et al., ed., Information For Everyday Survival: What You Need And Where To Get It. Morehead, Kentucky: Appalachian Adult Education Center Press, 1976.

Horkheimer, Foley A., ed., Educators Guide To Free Health, Physical Education and Recreation Materials. 9th ed., Randolph, Wisconsin: Educators Progress Service, Inc., 1976.

APPENDIX C

Developing an Individual Perspective to Health Workshop Evaluation

The purpose of this first session was to provide a conceptual framework for health that will be useful for teaching students at the elementary school level. Please complete the following evaluation form which will help me to determine how the workshop has met its objectives. In Section A, please circle the response which indicates how much you agree or disagree with each statement. In Section B, please respond freely to each question.

Section A

1. Today, individual health is influenced more by life style choices than by diseases.

   strongly agree agree unsure disagree strongly disagree

2. Historical perceptions of health (Hygiena & Asclepius) are useful for developing modern day goals for individual health.

   strongly agree agree unsure disagree strongly disagree

3. Individuals should make their own health choices, despite the outcome.

   strongly agree agree unsure disagree strongly disagree

4. If an individual chooses an unhealthy course, you should intervene.

   strongly agree agree unsure disagree strongly disagree

5. Decisions about individual health must be based on what is best for all.

   strongly agree agree unsure disagree strongly disagree

6. Teachers should encourage children, at every level, to base their own health decisions on personal needs, experiences, and future goals.

   strongly agree agree unsure disagree strongly disagree

7. Each person must take risks in order to understand their own health needs.

   strongly agree agree unsure disagree strongly disagree

8. Inner city environments encourage individuals to develop their adaptive abilities.

   strongly agree agree unsure disagree strongly disagree

Section B

1. Have you found the health resource booklet and materials presented useful to you? If so, how?

2. Do you feel you were adequately involved in the workshop? Please comment.

3. List what you consider the strengths of the workshop to be.

4. Were there weaknesses that you feel could be improved upon?

APPENDIX D

A Multicultural Perspective of Health Workshop Evaluation

The purpose of the second session was to provide an understanding and appreciation of cultural diversity. That a multicultural perspective of health, in an urban setting, is essential for viewing each child as an individual with distinct and separate needs was the focus. Please complete the following evaluation form which will help me to determine how the workshop has met its objectives. In Section A, please circle the response which indicates how much you agree or disagree with each statement. In Section B, please respond freely to each question. Thank you.

Section A

1. Culture rarely plays a part in how a child views his or her own health.

   strongly agree agree unsure disagree strongly disagree

2. How we view the health of others whose culture is different is based upon our own view of health.

   strongly agree agree unsure disagree strongly disagree

3. All children living in the same environment share common health problems.

   strongly agree agree unsure disagree strongly disagree

4. Income is a more important predictor of health levels than culture.

   strongly agree agree unsure disagree strongly disagree

5. Individuals whose income is high are assured good health.

   strongly agree agree unsure disagree strongly disagree

6. Teachers have the responsibility to provide health information that is relevant to the backgrounds and interests of all children they teach.

   strongly agree agree unsure disagree strongly disagree

7. Children should be encouraged to share the health practices and beliefs of their culture as a part of any health lesson.

   strongly agree agree unsure disagree strongly disagree

8. Teachers should not attempt to provide information that contradicts the health habits children have learned at home.

   strongly agree agree unsure disagree strongly disagree

Section B

1. Did you find discussing multicultural issues related to health difficult? Please comment.

2. Did you find working in small groups helpful for discussing health issues? Please comment.

3. Do you feel you were adequately involved in the workshop? Please comment.

4. List what you consider the strengths of the workshop to be.

5. Were there weaknesses that you feel could be improved upon?

6. Do you feel you will initiate health teachings in your classroom in the near future? If so, what topic(s) are of interest to you?

A P P E N D I X E

Community Interrelatedness Workshop Evaluation

The purpose of the third session was to put into practice the conceptual framework of health presented in this session. The focus was on the design of healthful teaching strategies that encourage individuality for all children within the school community. Please complete the following evaluation form which will help me to determine how the workshop has met its objectives. In Section A, please circle the response which indicates how much you agree or disagree with each statement. In Section B, please respond freely to each question. Thank you.

Section A

1. Each child will perceive a health related situation within the school setting differently.

   strongly agree agree unsure disagree strongly disagree

2. For some children going outside to recess in winter without a coat on is less health endangering than for others.

   strongly agree agree unsure disagree strongly disagree

3. Children should be included in the development of school health policy.

   strongly agree agree unsure disagree strongly disagree

4. Parents only need to be informed about the school's health program from their children.

   strongly agree agree unsure disagree strongly disagree

5. Teachers should not attempt to modify the health habits children have learned at home.

   strongly agree agree unsure disagree strongly disagree

6. Teachers within the learning community have a responsibility to provide information and to educate parents about health.

   strongly agree agree unsure disagree strongly disagree

7. Each school should develop health policies that encourage children to become aware of the reason for certain health practices.

   strongly agree agree unsure disagree strongly disagree

8. From classroom to classroom and from grade to grade, health teachings should be consistent.

   strongly agree agree unsure disagree strongly disagree

9. Teachers should encourage children, at every grade level, to base their own health decisions on personal needs, experiences, and future goals.

   strongly agree agree unsure disagree strongly disagree

Section B

1. Did you find the materials shared today from the Hunting for Healthful Hints booklet useful to you? If so, how?

2. Did you find working in small groups helpful for discussing school health issues? Please comment.

3. Do you feel you were adequately involved in the workshop? Please comment.

4. List what you consider the strengths of the workshop to be.

5. Were there weaknesses that you feel could be improved upon?

6. Were the educational philosophies of value for resolving health concerns and issues? Please comment.

APPENDIX F

MODULE--DEVELOPING AN INDIVIDUAL PERSPECTIVE TO HEALTH

The purpose of this first session is to provide a conceptual framework for health that will be useful for teaching students at the elementary school level. Lecture, discussion, and learning activities are approaches intended to motivate teachers to develop meaningful health lessons and to capture teachable moments based on a concept of holistic health. Presentation of methods and materials are offered as suggestions for classroom use.

Learning Goals

1. Participants will understand how health was historically perceived.

2. Participants will understand that an individual view of health involves each person interacting with the environment, their risk-taking ability, and individual adaptation.

3. Participants will understand the range of philosophy that can be the basis for any attempts to educate about health.

4. Participants will understand that teachers need to encourage each student to develop a view of health based upon unique sets of experiences, needs, and personal goals for the future.

5. Participants will understand the necessity for initiating health teachings at the elementary level.

Learning Activities

1. Each participant will have the opportunity to express what health means to them. These expressions will be shared with the group.

2. Each participant will have the opportunity to (1) generate three separate lists of health issues or problems that are found within the school; (2) divide into small groups and compare the philosophies with identified issues or problems; and (3) reconvene to discuss the findings and possible teaching approaches.

3. Each participant will have the opportunity to review a list of methods suggested for use in teaching about health, a health resource booklet of educational materials, and a method of evaluating materials.

MODULE--A MULTICULTURAL PERSPECITVE OF HEALTH

The purpose of the second session is to provide an understanding and appreciation of cultural diversity as it relates to health. That a multicultural perspective to health in an urban setting, is essential for viewing each child as an individual with distinct and separate needs will be the focus. Buzz sessions and group discussion will be utilized to help teachers select approaches coupled with health topics for initiation in the classroom.

Learning Goals

1. Participants will understand how cultural diversity impacts upon each child's view of health.

2. Participants will learn that the interactions between environment and heredity or culture are influential to individual health.

3. Participants will understand how the health of all children is influenced, in part, by economics.

4. Participants will learn how the teacher-identified health concerns and issues of children within the school can be approached in ways that encourage cultural diversity.

Learning Activities

1. Each participant will have the opportunity to identify different cultures represented within the school.

2. Each participant will have the opportunity, in small groups, to identify health related problems and concerns that seem to be culturally associated. These examples will be reviewed, discussed, and evaluated by the group as a whole. Selected examples will serve as the basis for choosing health learning experiences for future classroom teaching.

3. Participants will have the opportunity to develop a health lesson that can be taught by team approach or individually.

4. Participants will have the opportunity to teach that lesson in the classroom at a later date.

MODULE--COMMUNITY INTERRELATEDNESS AND HEALTH

The purpose of the third session is to put into practice the conceptual framework of health presented in other sessions. The focus will be the design of healthful school programs that encourage individuality for all children within the school community. Small working groups and later discussion by all participants are methods intended to generate a variety of useful teaching approaches.

Learning Goals

1. Participants will understand the importance of creating a school health program.

2. Participants will become more aware of the need to develop school policies based on a healthful perspective.

3. Participants will understand how to distinguish between those health related situations that must be individually experienced, experienced by children and/or taught by teachers, and health related situations that should be guided by educationally designed community policies intended for all.

4. Participants will understand how the health of children can be the basis for greater family participation within the learning community.

Learning Activities

1. Each participant will have the opportunity to review examples of inexpensive or free educational materials included in the Hunting for Healthful Hints booklet.

2. Each participant will have the opportunity to explore examples of health related situations found within the school community. These

examples will serve as a basis for designing learning experiences for children that allow for a maximum of individuality within a community setting.

3. Participants will have the opportunity to identify components within the school that could be the basis for developing a health program and condiser how to begin to form a comprehensive health program.

APPENDIX G

A CONTINUM FOR IDEAL HEALTH EDUCATION

There is a range of philosophy that can be the basis for any attempts to educate about the thoughtful advantages of risk and non-risk taking. The three basic philosophies follow:

Personal

At one extreme is a philosophy based on the premise that each individual must assess for himself whether risk taking will be a helpful means of adaptation or a threat to later functioning; the essential controls to avoid risks are personal controls; education should be open and unbiased as possible.

THE INDIVIDUAL IS CAPABLE OF AVOIDING OR SOLVING HIS OWN PROBLEMS.

Personal-Social

A middle group philosophy is one that respects individual's rights to choose risk or non-risk, but also focuses on social problems resulting from unwise choices; controls should be both personal and social (which allow some problems and, at the same time, unnecessarily restrict some people); education should help the individual make decisions, but ultimately tends to focus on problems, thus seeming to discourage most risks.

THE INDIVIDUAL CAN AVOID OR SOLVE SOME OF HIS OWN PROBLEMS BUT NEEDS SOCIETY'S HELP WITH SOME.

Social

At the other extreme is a philosophy based on the premise that some individual risk causes a variety of social problems; the essential controls to protect society must be social controls; education must help to identify problems and individuals who have them, must be part of a program to retrain and recondition risk takers, and must, finally, be a major factor in preventing social problems.

THE INDIVIDUAL CANNOT AVOID OR SOLVE HIS OWN PROBLEMS AND MUST HAVE HELP FROM SOCIETY.

Robert D. Russell, Health Education 6th ed., (Washington, D.C.: National Education Association, 1975).